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NEWS 11 Jun 10 PCTFULL has been reloaded
NEWS 12 Jul 02 FOREGE no longer contains STANDARDS file segment
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NEWS 17 Aug 08 PHARMAMarketLetter(PHARMAML) - new on STN
NEWS 18 Aug 08 NTIS has been reloaded and enhanced
NEWS 19 Aug 19 Aquatic Toxicity Information Retrieval (AQUIRE) now available on STN
NEWS 20 Aug 19 IFIPAT, IFICDB, and IFIUDB have been reloaded
NEWS 21 Aug 19 The MEDLINE file segment of TOXCENTER has been reloaded
NEWS 22 Aug 26 Sequence searching in REGISTRY enhanced
NEWS 23 Sep 03 JAPIO has been reloaded and enhanced
NEWS 24 Sep 16 Experimental properties added to the REGISTRY file
NEWS 25 Sep 16 Indexing added to some pre-1967 records in CA/CAPLUS
NEWS 26 Sep 16 CA Section Thesaurus available in CAPLUS and CA
NEWS 27 Oct 01 CASREACT Enriched with Reactions from 1907 to 1985
NEWS 28 Oct 21 EVENTLINE has been reloaded

NEWS EXPRESS October 14 CURRENT WINDOWS VERSION IS V6.01, CURRENT MACINTOSH VERSION IS V6.0a(ENG) AND V6.0Ja(JP), AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002
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FULL ESTIMATED COST 0.21 0.21

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=> s CX2 or carboxypeptidase X2 or metallocarboxypeptidase X2 or CPX2
L1 628 CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR CPX2

=> s l1 and (deficien? or disrupt? or knockout or knockout or transgen?)
L2 4 L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRANSGEN?)

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L3 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2002:51622 CAPLUS
DN 136:113768
TI ***Transgenic*** mice containing ***CX2*** gene ***disruptions*** and uses in screening drug
IN Allen, Keith D.; Baribault, Helene
PA Deltagen, Inc., USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002004622	A2	20020117	WO 2001-US21430	20010706

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002129396	A1	20020912	US 2001-900518	20010706

PRAI US 2000-216178P P 20000706
AB The present invention provides ***transgenic*** mice comprising a ***disruption*** in a ***CX2*** gene encoding ***carboxypeptidase*** ***X2*** and methods for constructing said ***transgenic*** mice. The invention relates to compns. and methods relating to the characterization of ***CX2*** gene function of ***transgenic*** mice. The invention relates to screening drugs modulating the function and expression of ***CX2*** gene. The ***transgenic*** mice have increased body wt., increased body length, or increased body wt. to body length ratio as compared to wild-type mice. The ***transgenic*** mice also have increased tolerance to glucose or increased ability to metabolize glucose as compared to wild-type mice. Such ***transgenic*** mice are useful as models for disease and for identifying agents that modulate gene expression and gene function, and as potential treatments for various disease states and disease conditions.

L3 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 2001:660020 CAPLUS
DN 136:53190
TI Critical range of soil boron for prognosis of boron ***deficiency*** in oilseed rape
AU Wei, Youzhang
CS Department of Soil Science and Agricultural Chemistry, Zhejiang University, Hangzhou, 310029, Peop. Rep. China
SO Pedosphere (2001), 11(3), 283-288
CODEN: PDOSEA; ISSN: 1002-0160
PB Science Press
DT Journal
LA English
AB Relationships between seed yields of oilseed rape (Brassica napus L.) and extractable boron concns. in three soil layers (A, P and W) were investigated through ten expts. on three types of soils (Alluvic Entisols, Udic Ferrisols and Stagnic Anthrosols) in northern, western and middle Zhejiang Province. Among several math. models used to described the relationships, the polynomial equation, y = a + bx + ***cx2*** + dx3, where y is the yield of oilseed rape seed and x the extractable boron concn. in P layer of soil, was the best one. The crit. range of the concns. corresponding to 90% of the max. oilseed rape yield was 0.40.apprx.0.52 mg kg-1. The extractable boron concn. of the P layers of the soils was the most stable. The crit. range detd. was verified through the prodn. practices of oilseed rape in Zhejiang and Anhui provinces.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 4 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000392626 EMBASE
TI Adoptive transfer of human natural killer cells in mice with severe combined immunodeficiency inhibits growth of Hsp70-expressing tumors.
AU Multhoff G.; Pfister K.; Botzler C.; Jordan A.; Scholz R.; Schmetzer H.; Burgstahler R.; Hiddemann W.
CS G. Multhoff, Dept. of Hematology and Oncology, University of Regensburg, Franz-Josef Strauss Allee 11, 93053 Regensburg, Germany. Gabriele.Multhoff@klinik.uni-regensburg.de
SO International Journal of Cancer, (1 Dec 2000) 88/5 (791-797).
Refs: 33
ISSN: 0020-7136 CODEN: IJCNAW

CY United States
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
016 Cancer
017 Public Health, Social Medicine and Epidemiology
029 Clinical Biochemistry
048 Gastroenterology
LA English
SL English
AB In vitro, tumor-selective Hsp70 plasma membrane localization correlates with increased sensitivity to lysis mediated by a subpopulation of human natural killer (NK) cells that adhere to plastic following cytokine stimulation. In the present study, we analyzed the capacity of adoptively transferred human NK cells in SCID/beige mice for local tumor control and prevention of metastatic dissemination of Hsp70-expressing CX+ and non-expressing CX- tumors following orthotopic (o.t.) injection. Both tumor sublines were derived by cell sorting of the original cell line, ***CX2*** , and thus exhibit an identical MHC and adhesion molecule expression pattern but differ with respect to Hsp70 plasma membrane expression. Viability of adherent, human NK cells in SCID/beige mice up to 18 days and the capacity to migrate have been demonstrated. Growth of Hsp70-expressing and non-expressing CX+ and CX- tumor cells was completely suppressed when 10 x 106 NK cells were injected into the i.p. cavity on day 4 after inoculation of 2.5 x 106 tumor cells. Although a single injection of S or 2.5 x 106 NK cells was not sufficient to suppress tumor growth completely in all mice, the reduction in size of CX+ tumors was significantly greater than that of CX- tumors. To mimic the clinical situation, ex vivo stimulated NK cells were injected i.v. on day 4 after o.t. injection of tumor cells. Under these conditions, growth of Hsp70-expressing primary tumors and metastases was suppressed. If CX- tumor cells were injected, 3 of 9 mice developed Hsp70-negative primary tumors. However, none of these mice developed distant metastases. In summary, our data indicate that Hsp70 acts as a recognition structure for adherent NK cells in a SCID/beige mouse model. (C) 2000 Wiley-Liss, Inc.

L3 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2002 ACS
AN 1984:13562 CAPLUS
DN 100:13562
TI Inclusive quasi-elastic knock-out of composite particles at large momentum transfers
AU Kadmenskii, S. G.; Ratis, J.
CS Voronezh. Gos. Univ., Voronezh, USSR
SO Yad. Fiz. (1983), 38(5), 1325-34
CODEN: IDFZA7
DT Journal
LA Russian
AB Formulas were constructed for cross sections of inclusive (p,p'X) reactions with knock-out of rapid fragments X(d, t, 3He, .alpha.), taking into account the nuclear distortions in the framework of the Glauber-Sitenko method. For energies Tp .ltoreq. 0.4 GeV the effective no. approxn. for the (p p'd) reaction is in agreement with exptl. data. In the energy region Tp .gtoreq. 0.67 GeV the (p,p'X) reactions can be described with a universal phenomenol. parameter ***Cx2*** which depends only on the type of the cluster knocked-out.

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(FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1 628 S CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR C
L2 4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRAN
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)

=> s l1 and py<=2000
1 FILES SEARCHED...
L4 590 L1 AND PY<=2000

=> dup rem l4
PROCESSING COMPLETED FOR L4
L5 564 DUP REM L4 (26 DUPLICATES REMOVED)

=> d bib abs 1-10

L5 ANSWER 1 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:401829 CAPLUS
DN 133:30964
TI Preparation of methotrexate derivatives for treatment of autoimmune disease and cancer
IN Whittaker, Robert George; Wells, Xanthe E.; Reilly, Wayne Gerrard
PA Commonwealth Scientific and Industrial Research Organisation, Australia
SO PCT Int. Appl., 47 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000034281	A1	20000615	WO 1999-AU1073	19991203 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
EP 1135390 A1 20010928 EP 1999-960710 19991203
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2002531566 T2 20020924 JP 2000-586727 19991203
NO 2001002720 A 20010731 NO 2001-2720 20010601
PRAI AU 1998-7513 A 19981204
WO 1999-AU1073 W 19991203
OS MARPAT 133:30964
AB Methotrexate conjugates M-[Y]n-NH-CAB- ***CX2*** -OR1 [M is methotrexate or an analog; A = H, ***CX2*** -OR2, halo; B = H, ***CX2*** -OR3, halo; X = H, halo; n = 0 or .gtoreq. 1; Y is a linker group, and when > 1, each Y is the same or different; R1, R2, R3 = H, (un)substituted Me, Et, (un)satd. fatty acyl group (with provisos)] were prepd. for use in the treatment of a disease with an autoimmune component and cancers. Thus, methotrexate-.gamma.-glycine Tris , in which Tris is C(CH2OH)3 and methotrexate is attached at the .gamma.-carbonyl to glycine, was prepd. and inhibited dihydrofolate reductase in the same concn. range as methotrexate and inhibited proliferation of cultured cells, but was less toxic than methotrexate.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:368269 CAPLUS
DN 133:18003
TI Functional trifluorovinyl monomers and their copolymerization with fluorinated olefins
IN Petrova, Petya; Ameduri, Bruno; Kostov, Georges; Boutevin, Bernard
PA Solvay (Societe Anonyme), Belg.
SO PCT Int. Appl., 39 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000031009	A1	20000602	WO 1999-EP9147	19991122 <--

W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
FR 2786178 A1 20000526 FR 1998-14931 19981125 <--
EP 1133462 A1 20010919 EP 1999-972616 19991122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2002530359 T2 20020917 JP 2000-583838 19991122
PRAI FR 1998-14931 A 19981125
WO 1999-EP9147 W 19991122
AB CF2:CF(CH2)mW [m = 1-3; W = CH(OH)CH2OH, PR1R2, P(:O)R3R4, P(:O)R6(OR5), P(:O)(OR7)(OR8), oxiranyl, or YZ; R1-4 = H, C1-20 alkyl, or (substituted) aryl; R5, R6 = H, C1-20 alkyl, (substituted) aryl (when R5 = H and m = 1, R6 .noteq. Ph); R7, R8 = H, C1-20 alkyl, or (substituted) aryl (when m = 1, R7 and R8 .noteq. H or Et); Y = O or S; Z = H, CH2CH2OH, CH2CO2H, or COMe; (when W = CH(OH)CH2OH, m = 1; when Y = O, Z .noteq. H, when Y = S, m = 3)] are manufd. and polymd. with CF2: ***CX2*** (X = H or F), with the provision that when m = 1 and X = H, W .noteq. oxiranyl. The resulting copolymers are useful in the manuf. of rubbers (no data) and may be crosslinked by with C5-8 nonconjugated diene before or after deprotection of the functional groups. A typical copolymer was manufd. by polymn. of tetrafluoroethylene with 2,3,3-trifluoroallyl alc. in Bu ether in the presence of AIBN at 60-75.degree..
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:116985 CAPLUS
DN 132:140975
TI Manufacture of carbon materials
IN Nishida, Ryoichi; Murase, Hiroaki
PA Osaka Gas Company Limited, Japan
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000007938 A1 20000217 WO 1999-JP4151 19990802 <--
W: CA, CN, JP, KR, US
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
PRAI JP 1998-219189 19980803
AB The carbon materials are formed by reacting a polyolefin deriv. represented by the following general formula: -(***CX2*** - ***CX2***)n- with Mg or an Mg alloy in an aprotic solvent in the presence of a Li salt and/or a metal halide, and the formed carbon materials have a polyyne structure represented by the following general formula: (-C=C-)n and/or a cumulene structure represented by the following general formula: (=C=C=)n in at least a part of the main chain skeleton. The carbon materials are suitable for electronic materials, etc.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 4 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:98679 CAPLUS
DN 132:152937
TI Adhesives and sealants for bonding glass and metal surfaces and curable unsaturated organic compounds
IN Blackwood, Keith Moray; Milne, Paul Edward Young; Goodby, John William; Hall, Alan William
PA The Secretary of State for Defence, UK
SO PCT Int. Appl., 57 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000006658 A2 20000210 WO 1999-GB2432 19990726 <--
WO 2000006658 A3 20000504
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9950589 A1 20000221 AU 1999-50589 19990726 <--
GB 2351499 A1 20010103 GB 2000-21226 19990726
GB 2351499 B2 20010509
EP 1100853 A2 20010523 EP 1999-934976 19990726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002521551 T2 20020716 JP 2000-562444 19990726
PRAI GB 1998-16169 A 19980725
WO 1999-GB2432 W 19990726
OS MARPAT 132:152937
GI

/ Structure 1 in file .gra /

AB An adhesive or sealant compn. comprises an unsatd. compd. I, esp., unsatd. substituted amides, provided that .gtoreq.1 of (a) R1 and R6 or (b) R2 and R3 or (c) R4 and R5 includes an electron withdrawing group, R7 = H, optionally substituted hydrocarbyl, perhaloalkyl, or functional group, the dotted lines are the presence or absence of bond, X1 = CX2X3 where the dotted line is absent and ***CX2*** where the dotted line is present, Y1 = CY2Y3 where the dotted line is absent and CY2 where the dotted line is present, X2, X3, Y2, Y3 = H, F; and where necessary, a polymn. initiator. Certain biocompatible adhesives for medical applications are included. A compn. contg. Irgacure 184 and CH2:CHC(O)N(CH2CH:CH2)2 (prepd. by reaction of acryloyl chloride and diallylamine) was applied as a thin layer between two glass plates and cured under UV light for 30 s.

L5 ANSWER 5 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:98500 CAPLUS
DN 132:152306
TI Allyl group-containing monomers and network polymers obtained therefrom
IN Blackwood, Keith Moray; Milne, Paul Edward Young; Goodby, John William; Hall, Alan William; Kelly, Steven Malcolm
PA The Secretary of State for Defence, UK
SO PCT Int. Appl., 118 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000006533 A2 20000210 WO 1999-GB2416 19990726 <--
WO 2000006533 A3 20000615
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
AU 9950579 A1 20000221 AU 1999-50579 19990726 <--
GB 2354521 A1 20010328 GB 2000-31000 19990726
EP 1100770 A2 20010523 EP 1999-934966 19990726
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI
JP 2002521529 T2 20020716 JP 2000-562340 19990726
PRAI GB 1998-16171 A 19980725
WO 1999-GB2416 W 19990726
OS MARPAT 132:152306
GI

/ Structure 2 in file .gra /

AB The title compds. comprise I where R1 is CH and R6 is a bond, or R1 and R6 together form an electron withdrawing group; R2 and R3 are independently selected from (CR7R8)n, or a group CR9R10, -(CR7R8CR9R10)- or -(CR9R10CR7R8)- where n is 0,1 or 2, R7 and R8 are independently selected from hydrogen or alkyl, and either one of R9 or R10 is hydrogen and the other is an electron withdrawing group, or R9 and R10 together form an electron withdrawing group, and R4 and R5 are independently selected from CH or CR11 where R11 is an electron withdrawing group; the dotted lines indicate the presence or absence of a bond, and X1 is a group CX2X3 where the dotted line bond to which it is attached is absent and a group ***CX2*** where the dotted line bond to which it is attached is present, Y1 is a group CY2Y3 where the dotted line bond to which it is attached is absent and a group CY2 where the dotted line bond to which it is attached is present, and X2, X3, Y2 and Y3 are independently selected from hydrogen and fluorine; R16 is a bridging group of valency r and r is an integer of 2 or more, subject to the following provisos: (i) that at least one of (a) R1 and R6 or (b) R2 and R3 or (c) R4 and R5 includes an electron withdrawing group. These compds. are useful in the prodn. of network polymers, for example for coatings or binders. Diallylamine and 1,10-dibromodecane were reacted to give A2N(CH2)10NA2 (A = allyl), which was reacted with CF3CO2H to give a salt, then polymd.

L5 ANSWER 6 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:15168 CAPLUS
DN 132:64057
TI Preparation of aryl perfluoroalkyl sulfones
IN Pevere, Virginie; Quiclet-Sire, Beatrice; Zard, Samir Z.; Bertrand, Frederique
PA Rhodia Chimie, Fr.
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA French
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2000000467 A1 20000106 WO 1999-FR1551 19990628 <--
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
FR 2780400 A1 19991231 FR 1998-8245 19980629 <--
FR 2780400 B3 20000908
AU 9943760 A1 20000117 AU 1999-43760 19990628 <--
PRAI FR 1998-8245 A 19980629
WO 1999-FR1551 W 19990628
OS CASREACT 132:64057; MARPAT 132:64057
AB RSO2(***CX2***)pR1 [R = substituted (hetero)aryl; R1 = electron attracting group; X = F or CnF2n+1; n.gtoreq.5; p.gtoreq.2] were prepd. by condensation of RN2+ with -SO2(***CX2***)pR1. Thus, 2,4-(O2N)C6H3N2BF4 was condensed with CF3SO2K to give 64% 2,4-(O2N)C6H3SO2CF3.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 7 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:723423 CAPLUS
DN 133:315607
TI Light-curable composition for photoresist
IN Ogata, Tomonari; Kato, Takeshi
PA Showa Denko K. K., Japan
SO Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2000284478 A2 20001013 JP 1999-93171 19990331 <--
AB The invention relates to a light-curable compn. contg.: (A) a sensitizer; (B) organoboron compd. B-(R1)(R2)(R3)(R4) Z+ (R 1-4 = alkyl, aryl, aralkyl, alkenyl, heterocyclics, alicyclics; Z+ = ammonium, sulfonium, oxosulfonium, etc.); and (C) a compd. having 2-6 ethylenic unsatd. groups ***CX2*** (R5)(R6) (X = -(CH2)m-O-(CH2)n-O-C(=O)-C(R7)=CH2 (m, n = 1-5 integer; R7 = H, methyl); R5-6 = X, H; C1-4 alkyl, etc.). The compn. shows the improved sensitivity.

L5 ANSWER 8 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:484045 CAPLUS
DN 133:89931
TI Manufacture of fluoroalkyl (meth)acrylates
IN Sonobe, Hiroshi
PA Mitsubishi Rayon Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 2000198763 A2 20000718 JP 1999-427 19990105 <--
OS MARPAT 133:89931
AB Me (meth)acrylate and Y(***CX2***)a(CH2)bOH (X, Y = H, F; a = 1-15; b = 1-2; X, Y, and a are defined to contain .gtoreq.3 F in a mol.) are transesterified by the use of Ti(OMe)4 catalyst and 2,2,6,6-tetraalkylpiperidineoxyl compds. or their derivs. as polymn. inhibitor to give CH2:CR7CO2(CH2)b(***CX2***)aY (R7 = H, Me). Thus, 3 mol Me methacrylate was transesterified with 1 mol 2,2,3,3-tetrafluoropropanol in presence of Ti(OMe)4 and 4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl to give 99.8% 2,2,3,3-tetrafluoropropyl methacrylate.

L5 ANSWER 9 OF 564 CAPLUS COPYRIGHT 2002 ACS
AN 2000:865162 CAPLUS
DN 134:30859
TI Perfluoro amorphous polymers for fabrication of porous membranes for separation of gases and liquids
IN Arcella, Vincenzo; Gordano, Amalia; Maccone, Patrizia; Drioli, Enrico
PA Ausimont S.p.A., Italy
SO Eur. Pat. Appl., 12 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI EP 1057521 A1 20001206 EP 2000-109957 20000511 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
IT 1312320 B1 20020415 IT 1999-MI1153 19990525
JP 2001011231 A2 20010116 JP 2000-153556 20000524
PRAI IT 1999-MI1153 A 19990525
GI

/ Structure 3 in file .gra /

AB Porous membranes of (per)fluorinated amorphous polymers, suitable for sepns., have a porosity of 5-500 nm, preferably 20-100 nm, detd. by at. force microscopy, and an av. pore size distribution in which 80-90% of the pores have a size range from -5 nm to +5 nm of the max. pore size distribution. These (per)fluoropolymers can be homopolymers of structures: (1) CF2=CY1Y2 (Y1,Y2 are F, Cl, CF3, and ORf (Rf = C1-5-perfluoroalkyl)), (2) I (Z = F, Rf, ORf; X1,X2 = F, CF3), (3) bisvinyloxymethanes of structure CFX1= ***CX2*** -O-CX3X4-O- ***CX2*** =CFX1 (X1, X2 = F, Cl, preferably F; X3,X4 = F,CF3), and (4) dienes of structure CF2=CF-O-(CF2)n-CF=CF2 (n = 1-5, preferably 1-2). Copolymers can also be prepd. from monomers of the above structures. Suitable membranes are prepd. from monomers such as tetrafluoroethylene, perfluoroalkyl vinyl C1-5-ethers, hexafluoropropene, and chlorotrifluoroethylene, with tetrafluoroethylene preferred. Suitable membrane supports are typically glass, quartz, poly(Me methacrylate), polycarbonate, polyurethane, polystyrene, ceramics, metal, and thermoplastic fluoropolymers, preferably glass and polyurethanes.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 10 OF 564 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 1
AN 2000357067 EMBASE
TI Isolable, stable diselenocarboxylate and selenothiocarboxylate salts: Syntheses, structures, reactivities of 2-(1,3-dimethylimidazolidinio)diselenocarboxylate and 2-(1,3-dimethylimidazolidinio)selenothiocarboxylate.
AU Nakayama J.; Kitahara T.; Sugihara Y.; Sakamoto A.; Ishii A.
CS J. Nakayama, Department of Chemistry, Faculty of Science, Saitama University, Urawa, Saitama 338-8570, Japan
SO Journal of the American Chemical Society, (27 Sep 2000) 122/38 (9120-9126).
ISSN: 0002-7863 CODEN: JACSAT
CY United States
DT Journal; Article
FS 029 Clinical Biochemistry
LA English
SL English
AB 2- (1,3-Dimethylimidazolidinio)diselenocarboxylate (16) was obtained in 48% yield as thermally stable, dark green crystals by reaction of 2-methylene-1,3-dimethylimidazolidine (7) with Se2Cl2 in the presence of Et3N. The reaction of 16 with elemental sulfur gave 2-(1,3-dimethylimidazolidinio)dithiocarboxylate (20) in 95% yield by exhaustive selenium-sulfur exchange, whereas the use of a limited amount of sulfur allowed the preparation of 2-(1,3-dimethylimidazolidinio)selenothiocarboxylate (19) as dark red crystals. X-ray crystallographic analyses revealed that the planes of the carbenium ion and ***CX2*** - (X = S, Se) parts of 16 and 20 are nearly perpendicular to each other. The observed geometries (including bond angles and lengths) of 16 and 20 were reproduced satisfactorily by ab initio calculations (B3LYP/6-31G* level) Discussion is also made on the structures of 16, 19, and 20 on the basis of spectroscopic data (NMR, IR, and UV/vis). Methylation of 16 with MeI furnished the carbenium iodide (26a), which possesses a diselenoester moiety, as thermally labile, green crystals. The reaction of 16 with two molar amounts of DMAD provided the 1:2 adduct (30a) in 67% yield. The reaction of 16 with N-[(p-tolylsulfonyl)imino]phenyliodinane gave the inner salt (35) in 68% yield with loss of selenium atom from the initial adduct (33).

=> d his

(FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1 628 S CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR C
L2 4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRAN
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)
L4 590 S L1 AND PY<=2000
L5 564 DUP REM L4 (26 DUPLICATES REMOVED)

=> s carboxypeptidase X2 or metallocarboxypeptidase X2 or CPX2
L6 12 CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR CPX2

=> dup rem l6
PROCESSING COMPLETED FOR L6
L7 12 DUP REM L6 (0 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 12 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 2002:51622 CAPLUS
DN 136:113768
TI Transgenic mice containing CX2 gene disruptions and uses in screening drug
IN Allen, Keith D.; Baribault, Helene
PA Deltagen, Inc., USA
SO PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO 2002004622 A2 20020117 WO 2001-US21430 20010706
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
US 2002129396 A1 20020912 US 2001-900518 20010706
PRAI US 2000-216178P P 20000706
AB The present invention provides transgenic mice comprising a disruption in a CX2 gene encoding ***carboxypeptidase*** ***X2*** and methods for constructing said transgenic mice. The invention relates to compns. and methods relating to the characterization of CX2 gene function of transgenic mice. The invention relates to screening drugs modulating the function and expression of CX2 gene. The transgenic mice have increased body wt., increased body length, or increased body wt. to body length ratio as compared to wild-type mice. The transgenic mice also have increased tolerance to glucose or increased ability to metabolize glucose as compared to wild-type mice. Such transgenic mice are useful as models for disease and for identifying agents that modulate gene expression and gene function, and as potential treatments for various disease states and disease conditions.

L7 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2002 ACS

AN 2001:70997 CAPLUS
DN 134:254802
TI A clinopyroxene-orthopyroxene-plagioclase symplectite formed by garnet breakdown in granulite facies, Guaxupe, Minas Gerais, Brazil
AU Choudhuri, Asit; Silva, Dailto
CS Instituto de Geociencias, Unicamp, Campinas, 13083-970, Brazil
SO Gondwana Research (2000), 3(4), 445-452
CODEN: GROEBW; ISSN: 1342-937X
PB International Association for Gondwana Research
DT Journal
LA English
AB In mafic granulites, garnet can form by reactions such as Opx + Pl = Cpx + Grt + Qtz; Opx + Pl = Grt + Qtz. As a result of isothermal decompression (ITD), garnet can then breakdown to a characteristic orthopyroxene-plagioclase symplectite. Mafic, iron-rich garnet-pyroxene granulite from the Guaxupe Massif has symplectite that formed by near-isothermal decompression, as a consequence of uplift of the granulite-facies terrane. This symplectite was found to consist of vermicular clinopyroxene-orthopyroxene-plagioclase, with clinopyroxene clearly growing from the garnet that is breaking down, modal amts. of clinopyroxene being less than orthopyroxene. Electron probe analyses show clear differences between core (Cpx1), rim, and symplectite clinopyroxene (***Cpx2***). Considering also the presence of magnetite in the symplectite texture, garnet breakdown is thought to be better represented by a reaction such as Cpx1 + Grt + O2 = ***Cpx2*** + Opx + Pl + Mt + Qtz.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:739976 CAPLUS
DN 130:105896
TI Identification of mouse CPX-2, a novel member of the metallocarboxypeptidase gene family: cDNA cloning, mRNA distribution, and protein expression and characterization
AU Xin, Xiaonan; Day, Robert; Dong, Weija; Lei, Yinghong; Fricker, Lloyd D.
CS Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY, 10461, USA
SO DNA and Cell Biology (1998), 17(10), 897-909
CODEN: DCEBE8; ISSN: 1044-5498
PB Mary Ann Liebert, Inc.
DT Journal
LA English
AB A novel member of the metallocarboxypeptidase gene family was identified from its homol. with carboxypeptidase E and has been designated CPX-2. The cDNA of 2500 nucleotides encodes a protein of 764 amino acids that contains an N-terminal signal peptide-like sequence, a 158-residue discoidin domain, and a 400-residue carboxypeptidase domain. The 400-residue metallocarboxypeptidase domain has 59% amino acid identity with a protein designated AEBP-1; 44% to 46% identity with carboxypeptidases E, N, and Z; and lower homol. with other members of the metallocarboxypeptidase gene family. The discoidin domain of CPX-2 has 22% amino acid identity with the carbohydrate-binding domain of discoideum-I, 29% to 34% identity with the phospholipid-binding domain of human factors V and VIII, and 59% identity with the discoidin-like domain on AEBP-1. CPX-2 is missing several of the predicted active-site residues that are conserved in most other members of the metallocarboxypeptidase gene family and which are thought to be required for enzyme activity. Expression of CPX-2 using the baculovirus system produced several forms of protein, from 80 to 105 kDa, but no detectable activity toward a variety of carboxypeptidase substrates. A shorter 50-kDa form of CPX-2, which contains the carboxypeptidase domain but not the discoidin domain, was also inactive when expressed in the baculovirus system. CPX-2 is able to bind to Sepharose-Arg; this binding is blocked by 10 mM Arg. Northern blot anal. showed CPX-2 mRNA in mouse brain, liver, kidney, and lung. In situ hybridization anal. of brain revealed a broad distribution. Areas that are enriched in CPX-2 include the hippocampus, cerebral cortex, median eminence, and choroid plexus. Taken together, these data suggest a widespread function for CPX-2, possibly as a binding protein rather than an active carboxypeptidase.
RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:132927 CAPLUS
DN 128:275766
TI Electrochemical and thermodynamic studies of the ion-pair formation of chloropentaamminecobalt(III) ion in ethyl alcohol-water media containing different dicarboxylate ligands
AU Zaghloul, A. A.; El-Naggar, G. A.; Ali, S. B. Abuo
CS Chemistry Department, Faculty of Science, Alexandria University, Alexandria, Egypt
SO Talanta (1998), 45(5), 865-873
CODEN: TLNTA2; ISSN: 0039-9140
PB Elsevier Science B.V.
DT Journal
LA English
AB The ion-pair dissocn. consts., KD, of the ion-pair formed between chloropentaamminecobalt(III) ion (***CpX2*** +) and a variety of dicarboxylate ligands, have been detd. from emf. measurements of a cell composed of glass and calomel electrodes. Measurements were made in water and in aq. binary mixts. of Et alc., over a wide range of solvent compn. (0-60 wt% Et alc.), at six different temps. (ranging from 30 to 55.degree. at intervals of 5.degree.). The thermodn. parameters of assocn. .DELTA.Gass0, .DELTA.Hass0 and .DELTA.Sass0 have been calcd. and discussed. .DELTA.Hass0-.DELTA.Sass0, .DELTA.Sass0-.DELTA.S1(or 2)0, .DELTA.Gass0-G1(or 2)0 and .DELTA.Hass)-.DELTA.H1(or 2)0 correlations among different solvent media and different dicarboxylate ligands were examd. (where 1 and 2 denote the first and the second dissocn. reactions of the studied dicarboxylic acids). The pKD value has been correlated with the dielec. const. of the medium according to Born's equation.

L7 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1998:80659 CAPLUS
DN 128:272922
TI Metamorphic evolution and protolith composition from the plagioclase-bearing eclogite-amphibolites in the Buchim Block of Serbo-Macedonian massif, Macedonia
AU Korikovskii, S. P.; Mirchovskii, V.; Zakariadze, G. S.
CS Inst. Geol. Rudn. Mestorozhden., Petrogr., Miner., i Geokhim., RAN, Moscow, 109017, Russia
SO Petrologiya (1997), 5(6), 596-613
CODEN: PTROEN; ISSN: 0869-5903
PB MAIK Nauka
DT Journal
LA Russian
AB Mineral equil. in plagioclase-bearing eclogite-amphibolites and assocd. garnet-clinopyroxene-amphibole-plagioclase cryst. schists of the Buchim Block were studied. The stable minerals in these rocks are clinopyroxene (Cpx) of augite-sodian augite-omphacite series with Jd 5-34%, garnet (Grt) with distinct prograde zoning, hastingsitic-tschermakitic-pargasitic hornblendes (Hb), and oligoclase. The Na content of coexisting Cpx and plagioclase (Pl); the presence or absence of Pl, Hb, Cpx, and Grt in metabasites; and the transition of eclogite to eclogite-amphibolite, amphibolite, and schists were controlled by ratios Na/Al, Ca:Al:(Mg.Fe), and (Na +Al)/(Mg + Fe) in the rock. Parameters of the prograde stage were: temp. 650.degree., pressure 12-12.5 kbar, depth 46-48 km, geothermal gradient 14.degree./km. The reaction structures of the ***Cpx2*** (0-6% Jd) + Pl2(25-32% An) kelyphytic rims on omphacite and Hb2 + Pl2 (46 73% An) rims around Grt at contacts with Cpx1 and Hb1 formed at the end of exhumation, as a result of rapid uplift under isothermal conditions or in the presence of temp. inversion. The effect of the (Na + Al)/(Mg + Fe) ratio of eclogites on the presence or absence of Pl in the Cpx + Grt paragenesis is considered and also phase equil. in eclogite complexes at moderate depth (Pl depth facies) are examd. The protoliths for the eclogite-amphibolites were basalts of an ocean-spreading environment (N- and T-MORB). The basaltic magmas were intruded into thin continental crust or sediments of newly formed oceanic crust.

L7 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1996:477658 CAPLUS
DN 125:147220
TI Orthopyroxene from the Serra de Mage meteorite: a structure-refinement procedure for a Pbca phase coexisting with a C2/c exsolved phase
AU Domeneghetti, M. Chiara; Tazzoli, Vittorio; Ballaran, Tiziana Boffa; Molin, G. Mario
CS CNR, Cent. Studio Cristallochimica Cristallografia, Pavia, 27100, Italy
SO American Mineralogist (1996), 81(7-8), 842-846
CODEN: AMMIAY; ISSN: 0003-004X
PB Mineralogical Society of America
DT Journal
LA English
AB An X-ray structure-refinement procedure was developed to characterize orthopyroxene from the Serra de Mage meteorite. In the studied sample, the orthorhombic phase coexists with exsoln. lamellae of C2/c augite, parallel to (100), with aOpx* .tplbond. aAug*, [101]Opx* .tplbond. CAug*, bOpx* .tplbond. bAug*. Diffraction maxima of the monoclinic phase overlap those of the orthorhombic phase with h + l = 2n, yielding violations of the extinction conditions for space group Pbca and simulating the lower symmetry space group P21ca. Structural parameters of the Pbca phase together with the WCpx parameter, which express the fraction of the C2/c phase present, were refined first. Fc values were calcd. using the equation Fc = .sqroot.(1 - WCpx)[Fc]Opx2 + WCpx[Fc] ***Cpx2*** , with [Fc]Cpx values taken from the structure refinement of an augite. Obsd. Fo values were then cor. by subtracting the calcd. contribution of the monoclinic phase with use of the equation Focorr = .sqroot.[Fo]2 - [Fc]Cpx2WCpx and used for a further refinement of the orthorhombic phase. The final residual indexes, Robs, were 2.11 and 1.78% for two crystals with different augite contents. This refinement procedure confirms Pbca as the correct space group and provides more accurate structural parameters for the Serra de Mage orthopyroxene.

L7 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1993:500016 CAPLUS
DN 119:100016
TI EPR of lead-lead mixed valence pairs in amazonite-type microcline
AU Petrov, Ivan; Mineeva, R. M.; Bershov, L. V.; Agel, Andreas
CS Inst. Mineral., Univ. Marburg, Marburg, 3550, Germany
SO American Mineralogist (1993), 78(5-6), 500-10
CODEN: AMMIAY; ISSN: 0003-004X
DT Journal
LA English
AB Using ESR at 9.2 GHz between 5 and 295 K, [Pb-Pb]3+ pairs, unknown in natural minerals, were studied in single crystals of amazonite of different colors and localities. The EPR data indicated two nonequivalent

Pb ions, A and B, at adjacent K positions in the microcline structure. The calcd. Hamiltonian parameters for the [PbA-PbB]3+ dimeric center are g11 = 1.80 .+-. 0.03, g22 = 1.56 .+-. 0.03, g33 = 1.36 .+-. 0.03, and 11A = 790 .+-. 10, A22A = 1575 .+-. 10, A33A = 1730 .+-. 10 .times. 10-4 T, and A11B = 695 .+-. 10, A22B = 1270 .+-. 10, A33B = 1530 .+-. 10 .times. 10-4 T. Estd. electron spin d. coeffs. Cs2 and ***Cpx2*** of both Pb ions A and B are ACs2 = 0.04, ACpz2 = 0.44, BCs2 = 0.05, and BCpz2 = 0.31. Stable [Pb-Pb]3+ dimeric centers can be formed only in ordered feldspar and only if one of the Pb2+ ions is charge compensated by Al,Si exchange at adjacent T1m positions. If the second Pb2+ ion is also compensated, no stable [Pb-Pb]3+ centers can arise. Heating at 543 K for 10 h caused Pb diffusion, and about 70% of Pb pairs were destroyed, whereas the color, EPR spectrum, and optical absorption (OA) band at 630 nm became unobservable. Subsequent irradn. can restore about 30% of the EPR spectrum, the OA band, and the blue color. Heating above 1073 K caused diffusion of the remaining Pb (about 30%), and the EPR spectrum, OA band, and color were destroyed irreversibly. The calcd. activation energy of Pb diffusion for light blue, blue, and green amazonite in the temp. range 673-773 K is 12, 14.5, and 21 kcal/mol, resp. Irradn.-induced, stable [Pb-Pb]3+ pairs causing the typical blue-green color were found only in amazonite-type microcline. In other similarity colored K feldspar and sodium feldspar, such centers are not known. Therefore, the name "amazonite" should by limited to classical, ordered microcline of blue-green color with [Pb-Pb]3+ pairs as the chromophore.

L7 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1994:303619 CAPLUS
DN 120:303619
TI P-T-t paths and tectonic history of an Early Precambrian granulite-facies terrane, Jining district, south-east Inner Mongolia, China
AU Lu, Liangzhao; Jin, Shiqin
CS Inst. Geol., Changchun Coll. Geol., Changchun, 130026, Peop. Rep. China
SO Journal of Metamorphic Geology (1993), 11(4), 483-98
CODEN: JMGEER; ISSN: 0263-4929
DT Journal
LA English
AB The widespread khondalite series of south-east Inner Mongolia consists largely of biotite-sillimanite-garnet gneiss and quartzo-feldspathic gneiss with some marble and mafic granulite layers. It has experienced two metamorphic events at .apprx. 2500 and 1900-2000 Ma. A pre-peak stage of the first metamorphism at T = 600 - 700.degree. and P > 6 - 7 kbar is recognized by the relict amphibolite facies assemblage Ky-Grt-Bt-Pl-Qtz (kyanite-garnet-biotite-plagioclase-quartz) and protected inclusions of biotite, hornblende, sodic plagioclase and quartz in garnet or orthopyroxene. The peak stage, with T = .apprx. 800 .+-. 50.degree. and P 8-10 kbar, is characterized by the widespread granulite facies assemblages Sil-Grt-Bt-Kfs-Pl-Qtz in gneiss and Opx-Cpx-Pl .+-. Hbl .+-. Grt in granulite. The P-T-t path suggests that the supracrustal sequence was buried in the lower crust by tectonic thickening during D1-D2. The beginning of the second metamorphism is characterized by further temp. rise to 700.degree. or more at lower pressure. This stage is manifested by the appearance of cordierite after garnet, fibrolite (Sil2) after biotite in gneiss and transformation of Hbl1 into Opx2 and ***Cpx2*** in granulite. Coronas of symplectitic Opx2 + Pl2 surrounding Grt1 and Cpx1 in mafic granulite are interpreted as products of near-isothermal decompression. The P-T-t path may be related tectonically to waning extension of the crust by the end of the Early Proterozoic.

L7 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1989:95350 CAPLUS
DN 110:95350
TI Phosphinylation of phenylacetylene with phosphorus trihalides in the presence of a tertiary amine
AU Mikhailov, G. Yu.; Trostyanskaya, I. G.; Kazankova, M. A.; Lutsenko, I. F.
CS Mosk. Gos. Univ., Moscow, USSR
SO Zhurnal Obshchei Khimii (1987), 57(11), 2636-7
CODEN: ZOKHA4; ISSN: 0044-460X
DT Journal
LA Russian
OS CASREACT 110:95350
AB Treating PhC.tplbond.CH with PX3 (X = Cl, Br) in C6H6, hexane, or CH2Cl2 contg. Et3N gave 42-51% PhC.tplbond. ***CPX2*** .

L7 ANSWER 10 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1986:572739 CAPLUS
DN 105:172739
TI 2-Phenylethynylphosphine dihalide
IN Mikhailov, G. Yu.; Trostyanskaya, I. G.; Kazankova, M. A.; Lutsenko, I. F.
PA Moscow State University, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret. 1986, (21), 84.
CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 1235870	A1	19860607	SU 1984-3859578	19841227

OS CASREACT 105:172739
AB PhC.tplbond. ***CPX2*** (X = Cl, Br) are prepd. by treating PhC.tplbond.CH with PX3 in an inert org. solvent in an inert gas atm. at 0-40.degree..

L7 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1984:139249 CAPLUS
DN 100:139249
TI Dissymmetric bis(cyclopentadienyl) and mixed tris(cyclopentadienyl) complexes of uranium(IV) with uranium as a pseudoasymmetric center
AU Dormond, A.
CS Lab. Synth. Electrosynth. Organometall., Fac. Sci., Dijon, 21100, Fr.
SO J. Organomet. Chem. (1983), 256(1), 47-56
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA French
AB Starting from the monocyclopentadienyls U(C5Me4R)X3 (X = Cl, NEt2; C5Me4 =
tetramethylcyclopentadienyl dianion; R = Me, Et), the bis-cyclopentadienyl dissym. complexes U(C5Me4R) ***CpX2*** [Cp = (un)substituted cyclopentadienyl] and the tris-cyclopentadienyl complexes U(C5Me4R)Cp2Cl were obtained. If the two Cp ligands had chiral centers, a mixt. of one racemic and two meso isomers were obtained. In the meso isomers, the U atom is a pseudoasym. center.

L7 ANSWER 12 OF 12 CAPLUS COPYRIGHT 2002 ACS
AN 1975:596416 CAPLUS
DN 83:196416
TI Two Roberts Victor cumulate eclogites and their re-equilibration
AU Lappin, M. A.; Dawson, J. B.
CS Marischal Coll., Univ. Aberdeen, Aberdeen, Scot.
SO Phys. Chem. Earth (1975), 9, 351-65
CODEN: PCEAAV
DT Journal
LA English
AB Both eclogites contain relatively Ca-rich garnets (25-45 grossular) and Na-rich (.apprx. 50% jadeite) tschermakite-poor clinopyroxenes. One specimen is foliated and layered. The layers consist of garnet-clinopyroxene, garnet-clinopyroxene-(kyanite), where all garnets form overgrowths on kyanite, and garnet-clinopyroxene-kyanite. The garnets of the latter layer are richer in Ca and poorer in Mg than those of the other layers though within these layers a cryptic mineral variation is present. Some garnets of the garnet-clinopyroxene layer are zoned. The 2nd specimen is graphite eclogite. The garnet overgrowths between kyanite and clinopyroxene are considered as part of a general closed reaction cpx1.+-.gt1.+-.ky.fwdarw. ***cpx2*** +gt2.+-.ky. The compn. of cpx1 for the overgrowth layer is calcd. from modal and mineral compns. The garnet-clinopyroxene layer could have been formed from cpx1 and smaller amts. of garnet of rather similar compn. The garnet-clinopyroxene-kyanite layer probably contained different clinopyroxenes and garnets. Textures, mineral compns. and calcd. mineral compns., distribution functions, and appropriate exptl. equil. curves, allow 3 stages in the temp.-pressure evolution of these rocks to be traced.

=> d his

(FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1 628 S CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR C
L2 4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRAN
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)
L4 590 S L1 AND PY<=2000
L5 564 DUP REM L4 (26 DUPLICATES REMOVED)
L6 12 S CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR CPX2
L7 12 DUP REM L6 (0 DUPLICATES REMOVED)

=> s metallocarboxypeptidase?
L8 222 METALLOCARBOXYPEPTIDASE?

=> s l1 (3a) X2
L9 27 L1 (3A) X2

=> s l8 (3a)X2
L10 0 L8 (3A) X2

=> s l8 (3a) X2
L11 0 L8 (3A) X2

=> s carboxypeptidase?
L12 52596 CARBOXYPEPTIDASE?

=> s l12 (3a) X2
L13 1 L12 (3A) X2

=> d bib abs

L13 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2002 ACS
AN 2002:51622 CAPLUS
DN 136:113768
TI Transgenic mice containing CX2 gene disruptions and uses in screening drug
IN Allen, Keith D.; Baribault, Helene
PA Deltagen, Inc., USA
SO PCT Int. Appl., 48 pp.

CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2002004622	A2	20020117	WO 2001-US21430	20010706

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002129396	A1	20020912	US 2001-900518	20010706

PRAI US 2000-216178P P 20000706

AB The present invention provides transgenic mice comprising a disruption in a CX2 gene encoding ***carboxypeptidase*** ***X2*** and methods for constructing said transgenic mice. The invention relates to compns. and methods relating to the characterization of CX2 gene function of transgenic mice. The invention relates to screening drugs modulating the function and expression of CX2 gene. The transgenic mice have increased body wt., increased body length, or increased body wt. to body length ratio as compared to wild-type mice. The transgenic mice also have increased tolerance to glucose or increased ability to metabolize glucose as compared to wild-type mice. Such transgenic mice are useful as models for disease and for identifying agents that modulate gene expression and gene function, and as potential treatments for various disease states and disease conditions.

=> s CPx2
L14 11 CPX2

=> dup rem l14
PROCESSING COMPLETED FOR L14
L15 11 DUP REM L14 (0 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 11 ANSWERS - CONTINUE? Y/(N):y

L15 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 2001:70997 CAPLUS
DN 134:254802
TI A clinopyroxene-orthopyroxene-plagioclase symplectite formed by garnet breakdown in granulite facies, Guaxupe, Minas Gerais, Brazil
AU Choudhuri, Asit; Silva, Dailto
CS Instituto de Geociencias, Unicamp, Campinas, 13083-970, Brazil
SO Gondwana Research (2000), 3(4), 445-452
CODEN: GROEBW; ISSN: 1342-937X
PB International Association for Gondwana Research
DT Journal
LA English
AB In mafic granulites, garnet can form by reactions such as Opx + Pl = Cpx + Grt + Qtz; Opx + Pl = Grt + Qtz. As a result of isothermal decompression (ITD), garnet can then breakdown to a characteristic orthopyroxene-plagioclase symplectite. Mafic, iron-rich garnet-pyroxene granulite from the Guaxupe Massif has symplectite that formed by near-isothermal decompression, as a consequence of uplift of the granulite-facies terrane. This symplectite was found to consist of vermicular clinopyroxene-orthopyroxene-plagioclase, with clinopyroxene clearly growing from the garnet that is breaking down, modal amts. of clinopyroxene being less than orthopyroxene. Electron probe analyses show clear differences between core (Cpx1), rim, and symplectite clinopyroxene (***Cpx2***). Considering also the presence of magnetite in the symplectite texture, garnet breakdown is thought to be better represented by a reaction such as Cpx1 + Grt + O2 = ***Cpx2*** + Opx + Pl + Mt + Qtz.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1998:739976 CAPLUS
DN 130:105896
TI Identification of mouse CPX-2, a novel member of the metallocarboxypeptidase gene family: cDNA cloning, mRNA distribution, and protein expression and characterization
AU Xin, Xiaonan; Day, Robert; Dong, Weija; Lei, Yinghong; Fricker, Lloyd D.
CS Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY, 10461, USA
SO DNA and Cell Biology (1998), 17(10), 897-909
CODEN: DCEBE8; ISSN: 1044-5498
PB Mary Ann Liebert, Inc.
DT Journal
LA English
AB A novel member of the metallocarboxypeptidase gene family was identified from its homol. with carboxypeptidase E and has been designated CPX-2. The cDNA of 2500 nucleotides encodes a protein of 764 amino acids that contains an N-terminal signal peptide-like sequence, a 158-residue discoidin domain, and a 400-residue carboxypeptidase domain. The 400-residue metallocarboxypeptidase domain has 59% amino acid identity with a protein designated AEBP-1; 44% to 46% identity with carboxypeptidases E, N, and Z; and lower homol. with other members of the metallocarboxypeptidase gene family. The discoidin domain of CPX-2 has 22% amino acid identity with the carbohydrate-binding domain of discoideum-I, 29% to 34% identity with the phospholipid-binding domain of human factors V and VIII, and 59% identity with the discoidin-like domain on AEBP-1. CPX-2 is missing several of the predicted active-site residues that are conserved in most other members of the metallocarboxypeptidase gene family and which are thought to be required for enzyme activity. Expression of CPX-2 using the baculovirus system produced several forms of protein, from 80 to 105 kDa, but no detectable activity toward a variety of carboxypeptidase substrates. A shorter 50-kDa form of CPX-2, which contains the carboxypeptidase domain but not the discoidin domain, was also inactive when expressed in the baculovirus system. CPX-2 is able to bind to Sepharose-Arg; this binding is blocked by 10 mM Arg. Northern blot anal. showed CPX-2 mRNA in mouse brain, liver, kidney, and lung. In situ hybridization anal. of brain revealed a broad distribution. Areas that are enriched in CPX-2 include the hippocampus, cerebral cortex, median eminence, and choroid plexus. Taken together, these data suggest a widespread function for CPX-2, possibly as a binding protein rather than an active carboxypeptidase.
RE.CNT 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1998:132927 CAPLUS
DN 128:275766
TI Electrochemical and thermodynamic studies of the ion-pair formation of chloropentaamminecobalt(III) ion in ethyl alcohol-water media containing different dicarboxylate ligands
AU Zaghloul, A. A.; El-Naggar, G. A.; Ali, S. B. Abuo
CS Chemistry Department, Faculty of Science, Alexandria University, Alexandria, Egypt
SO Talanta (1998), 45(5), 865-873
CODEN: TLNTA2; ISSN: 0039-9140
PB Elsevier Science B.V.
DT Journal
LA English
AB The ion-pair dissocn. consts., KD, of the ion-pair formed between chloropentaamminecobalt(III) ion (***CpX2*** +) and a variety of dicarboxylate ligands, have been detd. from emf. measurements of a cell composed of glass and calomel electrodes. Measurements were made in water and in aq. binary mixts. of Et alc., over a wide range of solvent compn. (0-60 wt% Et alc.), at six different temps. (ranging from 30 to 55.degree. at intervals of 5.degree.). The thermodn. parameters of assocn. .DELTA.Gass0, .DELTA.Hass0 and .DELTA.Sass0 have been calcd. and discussed. .DELTA.Hass0-.DELTA.Sass0, .DELTA.Sass0-.DELTA.S1(or 2)0, .DELTA.Gass0-G1(or 2)0 and .DELTA.Hass)-.DELTA.H1(or 2)0 correlations among different solvent media and different dicarboxylate ligands were examd. (where 1 and 2 denote the first and the second dissocn. reactions of the studied dicarboxylic acids). The pKD value has been correlated with the dielec. const. of the medium according to Born's equation.

L15 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1998:80659 CAPLUS
DN 128:272922
TI Metamorphic evolution and protolith composition from the plagioclase-bearing eclogite-amphibolites in the Buchim Block of Serbo-Macedonian massif, Macedonia
AU Korikovskii, S. P.; Mirchovskii, V.; Zakariadze, G. S.
CS Inst. Geol. Rudn. Mestorozhden., Petrogr., Miner., i Geokhim., RAN, Moscow, 109017, Russia
SO Petrologiya (1997), 5(6), 596-613
CODEN: PTROEN; ISSN: 0869-5903
PB MAIK Nauka
DT Journal
LA Russian
AB Mineral equil. in plagioclase-bearing eclogite-amphibolites and assocd. garnet-clinopyroxene-amphibole-plagioclase cryst. schists of the Buchim Block were studied. The stable minerals in these rocks are clinopyroxene (Cpx) of augite-sodian augite-omphacite series with Jd 5-34%, garnet (Grt) with distinct prograde zoning, hastingsitic-tschermakitic-pargasitic hornblendes (Hb), and oligoclase. The Na content of coexisting Cpx and plagioclase (Pl); the presence or absence of Pl, Hb, Cpx, and Grt in metabasites; and the transition of eclogite to eclogite-amphibolite, amphibolite, and schists were controlled by ratios Na/Al, Ca:Al:(Mg.Fe), and (Na +Al)/(Mg + Fe) in the rock. Parameters of the prograde stage were: temp. 650.degree., pressure 12-12.5 kbar, depth 46-48 km, geothermal gradient 14.degree./km. The reaction structures of the ***Cpx2*** (0-6% Jd) + Pl2(25-32% An) kelyphytic rims on omphacite and Hb2 + Pl2 (46 73% An) rims around Grt at contacts with Cpx1 and Hb1 formed at the end of exhumation, as a result of rapid uplift under isothermal conditions or in the presence of temp. inversion. The effect of the (Na + Al)/(Mg + Fe) ratio of eclogites on the presence or absence of Pl in the Cpx + Grt paragenesis is considered and also phase equil. in eclogite complexes at moderate depth (Pl depth facies) are examd. The protoliths for the eclogite-amphibolites were basalts of an ocean-spreading environment (N- and T-MORB). The basaltic magmas were intruded into thin continental crust or sediments of newly formed oceanic crust.

L15 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1996:477658 CAPLUS

DN 125:147220
TI Orthopyroxene from the Serra de Mage meteorite: a structure-refinement procedure for a Pbca phase coexisting with a C2/c exsolved phase
AU Domeneghetti, M. Chiara; Tazzoli, Vittorio; Ballaran, Tiziana Boffa; Molin, G. Mario
CS CNR, Cent. Studio Cristallochimica Cristallografia, Pavia, 27100, Italy
SO American Mineralogist (1996), 81(7-8), 842-846
CODEN: AMMIAY; ISSN: 0003-004X
PB Mineralogical Society of America
DT Journal
LA English
AB An X-ray structure-refinement procedure was developed to characterize orthopyroxene from the Serra de Mage meteorite. In the studied sample, the orthorhombic phase coexists with exsoln. lamellae of C2/c augite, parallel to (100), with aOpx* .tplbond. aAug*, [101]Opx* .tplbond. CAug*, bOpx* .tplbond. bAug*. Diffraction maxima of the monoclinic phase overlap those of the orthorhombic phase with h + l = 2n, yielding violations of the extinction conditions for space group Pbca and simulating the lower symmetry space group P21ca. Structural parameters of the Pbca phase together with the WCpx parameter, which express the fraction of the C2/c phase present, were refined first. Fc values were calcd. using the equation Fc = .sqroot.(1 - WCpx)[Fc]Opx2 + WCpx[Fc] ***Cpx2*** , with [Fc]Cpx values taken from the structure refinement of an augite. Obsd. Fo values were then cor. by subtracting the calcd. contribution of the monoclinic phase with use of the equation Focorr = .sqroot.[Fo]2 - [Fc]Cpx2WCpx and used for a further refinement of the orthorhombic phase. The final residual indexes, Robs, were 2.11 and 1.78% for two crystals with different augite contents. This refinement procedure confirms Pbca as the correct space group and provides more accurate structural parameters for the Serra de Mage orthopyroxene.

L15 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1993:500016 CAPLUS
DN 119:100016
TI EPR of lead-lead mixed valence pairs in amazonite-type microcline
AU Petrov, Ivan; Mineeva, R. M.; Bershov, L. V.; Agel, Andreas
CS Inst. Mineral., Univ. Marburg, Marburg, 3550, Germany
SO American Mineralogist (1993), 78(5-6), 500-10
CODEN: AMMIAY; ISSN: 0003-004X
DT Journal
LA English
AB Using ESR at 9.2 GHz between 5 and 295 K, [Pb-Pb]3+ pairs, unknown in natural minerals, were studied in single crystals of amazonite of different colors and localities. The EPR data indicated two nonequivalent Pb ions, A and B, at adjacent K positions in the microcline structure. The calcd. Hamiltonian parameters for the [PbA-PbB]3+ dimeric center are g11 = 1.80 .+-. 0.03, g22 = 1.56 .+-. 0.03, g33 = 1.36 .+-. 0.03, and 11A = 790 .+-. 10, A22A = 1575 .+-. 10, A33A = 1730 .+-. 10 .times. 10-4 T, and A11B = 695 .+-. 10, A22B = 1270 .+-. 10, A33B = 1530 .+-. 10 .times. 10-4 T. Estd. electron spin d. coeffs. Cs2 and ***Cpx2*** of both Pb ions A and B are ACs2 = 0.04, ACpz2 = 0.44, BCs2 = 0.05, and BCpz2 = 0.31. Stable [Pb-Pb]3+ dimeric centers can be formed only in ordered feldspar and only if one of the Pb2+ ions is charge compensated by Al,Si exchange at adjacent T1m positions. If the second Pb2+ ion is also compensated, no stable [Pb-Pb]3+ centers can arise. Heating at 543 K for 10 h caused Pb diffusion, and about 70% of Pb pairs were destroyed, whereas the color, EPR spectrum, and optical absorption (OA) band at 630 nm became unobservable. Subsequent irradn. can restore about 30% of the EPR spectrum, the OA band, and the blue color. Heating above 1073 K caused diffusion of the remaining Pb (about 30%), and the EPR spectrum, OA band, and color were destroyed irreversibly. The calcd. activation energy of Pb diffusion for light blue, blue, and green amazonite in the temp. range 673-773 K is 12, 14.5, and 21 kcal/mol, resp. Irradn.-induced, stable [Pb-Pb]3+ pairs causing the typical blue-green color were found only in amazonite-type microcline. In other similarity colored K feldspar and sodium feldspar, such centers are not known. Therefore, the name "amazonite" should by limited to classical, ordered microcline of blue-green color with [Pb-Pb]3+ pairs as the chromophore.

L15 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1994:303619 CAPLUS
DN 120:303619
TI P-T-t paths and tectonic history of an Early Precambrian granulite-facies terrane, Jining district, south-east Inner Mongolia, China
AU Lu, Liangzhao; Jin, Shiqin
CS Inst. Geol., Changchun Coll. Geol., Changchun, 130026, Peop. Rep. China
SO Journal of Metamorphic Geology (1993), 11(4), 483-98
CODEN: JMGEER; ISSN: 0263-4929
DT Journal
LA English
AB The widespread khondalite series of south-east Inner Mongolia consists largely of biotite-sillimanite-garnet gneiss and quartzo-feldspathic gneiss with some marble and mafic granulite layers. It has experienced two metamorphic events at .apprx. 2500 and 1900-2000 Ma. A pre-peak stage of the first metamorphism at T = 600 - 700.degree. and P > 6 - 7 kbar is recognized by the relict amphibolite facies assemblage Ky-Grt-Bt-Pl-Qtz (kyanite-garnet-biotite-plagioclase-quartz) and protected inclusions of biotite, hornblende, sodic plagioclase and quartz in garnet or orthopyroxene. The peak stage, with T = .apprx. 800 .+-. 50.degree. and P 8-10 kbar, is characterized by the widespread granulite facies assemblages Sil-Grt-Bt-Kfs-Pl-Qtz in gneiss and Opx-Cpx-Pl .+-. Hbl .+-. Grt in granulite. The P-T-t path suggests that the supracrustal sequence was buried in the lower crust by tectonic thickening during D1-D2. The beginning of the second metamorphism is characterized by further temp. rise to 700.degree. or more at lower pressure. This stage is manifested by the appearance of cordierite after garnet, fibrolite (Sil2) after biotite in gneiss and transformation of Hbl1 into Opx2 and ***Cpx2*** in granulite. Coronas of symplectitic Opx2 + Pl2 surrounding Grt1 and Cpx1 in mafic granulite are interpreted as products of near-isothermal decompression. The P-T-t path may be related tectonically to waning extension of the crust by the end of the Early Proterozoic.

L15 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1989:95350 CAPLUS
DN 110:95350
TI Phosphinylation of phenylacetylene with phosphorus trihalides in the presence of a tertiary amine
AU Mikhailov, G. Yu.; Trostyanskaya, I. G.; Kazankova, M. A.; Lutsenko, I. F.
CS Mosk. Gos. Univ., Moscow, USSR
SO Zhurnal Obshchei Khimii (1987), 57(11), 2638-7
CODEN: ZOKHA4; ISSN: 0044-460X
DT Journal
LA Russian
OS CASREACT 110:95350
AB Treating PhC.tplbond.CH with PX3 (X = Cl, Br) in C6H6, hexane, or CH2Cl2 contg. Et3N gave 42-51% PhC.tplbond. ***CPX2*** .

L15 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1986:572739 CAPLUS
DN 105:172739
TI 2-Phenylethynylphosphine dihalide
IN Mikhailov, G. Yu.; Trostyanskaya, I. G.; Kazankova, M. A.; Lutsenko, I. F.
PA Moscow State University, USSR
SO U.S.S.R.
From: Otkrytiya, Izobret. 1986, (21), 84.
CODEN: URXXAF
DT Patent
LA Russian
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI SU 1235870	A1	19860607	SU 1984-3859578	19841227

OS CASREACT 105:172739
AB PhC.tplbond. ***CPX2*** (X = Cl, Br) are prepd. by treating PhC.tplbond.CH with PX3 in an inert org. solvent in an inert gas atm. at 0-40.degree..

L15 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1984:139249 CAPLUS
DN 100:139249
TI Dissymmetric bis(cyclopentadienyl) and mixed tris(cyclopentadienyl) complexes of uranium(IV) with uranium as a pseudoasymmetric center
AU Dormond, A.
CS Lab. Synth. Electrosynth. Organometall., Fac. Sci., Dijon, 21100, Fr.
SO J. Organomet. Chem. (1983), 256(1), 47-56
CODEN: JORCAI; ISSN: 0022-328X
DT Journal
LA French
AB Starting from the monocyclopentadienyls U(C5Me4R)X3 (X = Cl, NEt2; C5Me4 =
tetramethylcyclopentadienyl dianion; R = Me, Et), the bis-cyclopentadienyl dissym. complexes U(C5Me4R) ***CpX2*** [Cp = (un)substituted cyclopentadienyl] and the tris-cyclopentadienyl complexes U(C5Me4R)Cp2Cl were obtained. If the two Cp ligands had chiral centers, a mixt. of one racemic and two meso isomers were obtained. In the meso isomers, the U atom is a pseudoasym. center.

L15 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2002 ACS
AN 1975:596416 CAPLUS
DN 83:196416
TI Two Roberts Victor cumulate eclogites and their re-equilibration
AU Lappin, M. A.; Dawson, J. B.
CS Marischal Coll., Univ. Aberdeen, Aberdeen, Scot.
SO Phys. Chem. Earth (1975), 9, 351-65
CODEN: PCEAAV
DT Journal
LA English
AB Both eclogites contain relatively Ca-rich garnets (25-45 grossular) and Na-rich (.apprx. 50% jadeite) tschermakite-poor clinopyroxenes. One specimen is foliated and layered. The layers consist of garnet-clinopyroxene, garnet-clinopyroxene-(kyanite), where all garnets form overgrowths on kyanite, and garnet-clinopyroxene-kyanite. The garnets of the latter layer are richer in Ca and poorer in Mg than those of the other layers though within these layers a cryptic mineral variation is present. Some garnets of the garnet-clinopyroxene layer are zoned. The 2nd specimen is graphite eclogite. The garnet overgrowths between kyanite and clinopyroxene are considered as part of a general closed reaction cpx1.+-.gt1.+-.ky.fwdarw. ***cpx2*** +gt2.+-.ky. The compn. of cpx1 for the overgrowth layer is calcd. from modal and mineral compns. The garnet-clinopyroxene layer could have been formed from cpx1 and smaller amts. of garnet of rather similar compn. The garnet-clinopyroxene-kyanite layer probably contained different clinopyroxenes and garnets. Textures, mineral compns. and calcd. mineral compns., distribution functions, and appropriate exptl. equil. curves, allow 3 stages in the temp.-pressure evolution of these rocks to be traced.

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=> d his

    (FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

    FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1         628 S CX2 OR CARBOXYPEPTIDASE X2 OR
METALLOCARBOXYPEPTIDASE X2 OR C
L2           4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR
KNOCKOUT OR TRAN
L3           4 DUP REM L2 (0 DUPLICATES REMOVED)
L4         590 S L1 AND PY<=2000
L5         564 DUP REM L4 (26 DUPLICATES REMOVED)
L6          12 S  CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE
X2 OR CPX2
L7          12 DUP REM L6 (0 DUPLICATES REMOVED)
L8         222 S METALLOCARBOXYPEPTIDASE?
L9          27 S L1 (3A) X2
L10          0 S L8 (3A)X2
L11          0 S L8 (3A) X2
L12      52596 S CARBOXYPEPTIDASE?
L13          1 S L12 (3A) X2
L14         11 S CPX2
L15         11 DUP REM L14 (0 DUPLICATES REMOVED)

=> s l14 and diabet?
L16          0 L14 AND DIABET?

=> s l1 and diabet?
L17          0 L1 AND DIABET?

=> s funtion? (3a) biolog?
L18          2 FUNTION? (3A) BIOLOG?

=> s function? (3a) biolog?
L19      35198 FUNCTION? (3A) BIOLOG?

=> s l1 and l19
L20          0 L1 AND L19

=> s l8 and l19
L21          4 L8 AND L19

=> dup rem l21
PROCESSING COMPLETED FOR L21
L22          2 DUP REM L21 (2 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):y

L22 ANSWER 1 OF 2  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS
INC.DUPLICATE 1
AN   2001:243859 BIOSIS
DN   PREV200100243859
TI   Thrombin-activatable fibrinolysis inhibitor (TAFI, plasma
     procarboxypeptidase B, procarboxypeptidase R, procarboxypeptidase U.
AU   Bouma, Bonno N. (1); Marx, Pauline F.; Mosnier, Laurent O.; Meijers, Joost
     C. M.
CS   (1) Thrombosis and Hemostasis Laboratory, Department of Haematology,
     University Medical Center Utrecht, G.03.647, Utrecht, 3508 GA:
     b.n.bouma@lab.azu.nl Netherlands
SO   Thrombosis Research, (March 1, 2001) Vol. 101, No. 5, pp. 329-354. print.
     ISSN: 0049-3848.
DT   General Review
LA   English
SL   English
AB   Recently, a new inhibitor of fibrinolysis was described. This inhibitor
     downregulated fibrinolysis after it was activated by thrombin, and was
     therefore named TAFI (thrombin-activatable fibrinolysis inhibitor; EC
     3.4.17.20). TAFI turned out to be identical to previously described
     proteins, procarboxypeptidase U, procarboxy-peptidase R, and plasma
     procarboxypeptidase B. In this overview, the protein will be referred to
     as TAFI. TAFI is a procarboxypeptidase and a member of the family of
      ***metallocarboxypeptidases*** . These enzymes are circulating in plasma
     and are present in several tissues such as pancreas. In this review, we
     will describe the properties of basic carboxypeptidases with the emphasis
     on the role of TAFI in coagulation and fibrinolysis. It cannot be ruled
     out, however, that TAFI has other, yet undefined, ***functions*** in
      ***biology*** .

L22 ANSWER 2 OF 2  BIOSIS  COPYRIGHT 2002 BIOLOGICAL ABSTRACTS
INC.DUPLICATE 2
AN   1994:65656 BIOSIS
DN   PREV199497078656
TI   Noncholinergic function of cholinesterases.
AU   Balasubramanian, A. S.; Bhanumathy, C. D.
CS   Neurochem. Lab., Dep. Neurol. Sci., Christian Med. Coll. and Hosp.,
     Vellore 632 004 India
SO   FASEB (Federation of American Societies for Experimental Biology) Journal,
     (1993) Vol. 7, No. 14, pp. 1354-1358.
     ISSN: 0892-6638.
DT   General Review
LA   English
AB   Cholinesterases (acetylcholinesterase and butyrylcholinesterase) exhibit
     additional catalytic activities apart from their well-known action in
     hydrolyzing choline esters. An amine-sensitive aryl acylamidase activity
     is exhibited by both acetyl- and butyrylcholinesterases. A
      ***metallocarboxypeptidase*** -like activity is found associated with
     both acetyl- and butyrylcholinesterases. The peptidase activity exhibited
     by butyrylcholinesterase was located in a 50-kDa COOH-terminal fragment.
     Acetylcholinesterase is implicated in noncholinergic functions in the
     substantia nigra. A relationship between tumorigenesis, cell
     differentiation, and cholinesterases has been speculated. The sequence
     similarities between different esterases, lipases, thyroglobulin, cell
     adhesion proteins, and cholinesterases would make it appear that
     cholinesterases are capable of exhibiting more than one ***biological***
     activity and their ***functions*** are wider than what is hitherto
     known.


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    (FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

    FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1         628 S CX2 OR CARBOXYPEPTIDASE X2 OR
METALLOCARBOXYPEPTIDASE X2 OR C
L2           4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR
KNOCKOUT OR TRAN
L3           4 DUP REM L2 (0 DUPLICATES REMOVED)
L4         590 S L1 AND PY<=2000
L5         564 DUP REM L4 (26 DUPLICATES REMOVED)
L6          12 S  CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE
X2 OR CPX2
L7          12 DUP REM L6 (0 DUPLICATES REMOVED)
L8         222 S METALLOCARBOXYPEPTIDASE?
L9          27 S L1 (3A) X2
L10          0 S L8 (3A)X2
L11          0 S L8 (3A) X2
L12      52596 S CARBOXYPEPTIDASE?
L13          1 S L12 (3A) X2
L14         11 S CPX2
L15         11 DUP REM L14 (0 DUPLICATES REMOVED)
L16          0 S L14 AND DIABET?
L17          0 S L1 AND DIABET?
L18          2 S FUNTION? (3A) BIOLOG?
L19      35198 S FUNCTION? (3A) BIOLOG?
L20          0 S L1 AND L19
L21          4 S L8 AND L19
L22          2 DUP REM L21 (2 DUPLICATES REMOVED)

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L23       4422 L12 AND DIABE?

=> s l12 and diabet?
L24       4422 L12 AND DIABET?

=> s l24 and py<2000
  1 FILES SEARCHED...
L25       2754 L24 AND PY<2000

=> d bib abs

L25 ANSWER 1 OF 2754  BIOSIS  COPYRIGHT 2002 BIOLOGICAL
ABSTRACTS INC.
AN   2002:86905 BIOSIS
DN   PREV200200086905
TI   Clinical disorders associated with ***carboxypeptidase*** E mutation.
AU   Naggert, J. K.; Leiter, E. H.
CS   Bar Harbor, Me. USA
     ASSIGNEE: THE JACKSON LABORATORY
PI   US 5690932 Nov. 25, 1997
SO   Official Gazette of the United States Patent and Trademark Office Patents,
     ( ***Nov. 25, 1997*** ) Vol. 1204, No. 4, pp. 3000.
     ISSN: 0098-1133.
DT   Patent
LA   English


=> d bib abs 2

L25 ANSWER 2 OF 2754  BIOSIS  COPYRIGHT 2002 BIOLOGICAL
ABSTRACTS INC.
AN   2000:161273 BIOSIS
DN   PREV200000161273
TI   NAALADase inhibition improves nerve conduction velocity and attenuates
     hyperalgesia in streptozotocin-induced ***diabetic*** rats.
AU   Slusher, B. S. (1); Brown, B.; Dumas, T.; Thomas, C.; Kazakova, I.;
     Thomas, A. G. (1); Ho, T. W.; Jackson, P. (1); Yao, Y.-M.
CS   (1) Guilford Pharmaceuticals, Inc., Baltimore, MD USA
SO   Society for Neuroscience Abstracts., (1999) Vol. 25, No. 1-2, pp. 2231.
     Meeting Info.: 29th Annual Meeting of the Society for Neuroscience. Miami
     Beach, Florida, USA October 23-28, 1999 Society for Neuroscience
     . ISSN: 0190-5295.
DT   Conference
LA   English
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SL English

=> s l25 and review
L26 760 L25 AND REVIEW

=> d bib abs 1-10

L26 ANSWER 1 OF 760 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1996:436576 BIOSIS
DN PREV199699150182
TI The role of prohormone convertases in insulin biosynthesis: Evidence for inherited defects in their action in man and experimental animals.
AU Steiner, D. F. (1); Rouille, Y.; Gong, Q.; Martin, S.; Carroll, R.; Chan, S. J.
CS (1) Howard Hughes Med. Inst., 5841 S. Maryland Avenue, MC1028, Chicago, IL 60637 USA
SO Diabetes & Metabolism, (1996) Vol. 22, No. 2, pp. 94-104.
DT General Review
LA English
SL English; French
AB The hormone insulin remains the cornerstone of ***diabetic*** therapy since it is required for almost all cases of Type 1 and many cases of Type 2 ***diabetes*** . Since the discovery of insulin in 1921, much has been learned about its chemistry, structure and action as well as its production in the beta cell. Insulin is formed through a series of precursors, beginning with preproinsulin, the protein encoded in the insulin gene. These precursors direct the prohormone into the secretory pathway and ultimately into the secretory granules where it is converted into insulin and C-peptide. These products are stored and secreted together in a highly regulated manner in response to glucose and other stimuli. This ***review*** focuses on the recently discovered prohormone convertases, PC2 and PC3 (PC1), the enzymes responsible for the endoproteolytic processing of proinsulin to insulin and C-peptide in the beta cell as well as for the selective processing of proglucagon to glucagon in the alpha cell or GLP1 in intestinal L-cells. PC2 and PC3 are calcium-dependent serine proteases related to the bacterial enzyme subtilisin. They cleave selectively at Lys-Arg or Arg-Arg sites in precursors, generating products with C-terminal basic residues that are then removed by ***carboxypeptidase*** E, an exopeptidase. All 3 enzymes are expressed mainly in secretory granules of neuroendocrine cells throughout the body and in the brain. Inherited defects affecting the prohormone-processing enzymes have recently been found in association with unusual syndromes of obesity and other metabolic disorders.

L26 ANSWER 2 OF 760 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 1996:229104 BIOSIS
DN PREV199698793233
TI The role of prohormone convertases in insulin biosynthesis: Evidence for inherited defects in their action in man and experimental animals.
AU Steiner, D. F. (1); Rouille, Y.; Gong, Q.; Martin, S.; Carroll, R.; Chan, S. J.
CS (1) Howard Hughes Med. Inst., 5841 S. Maryland Ave., MC1028 Chicago, IL 60637 USA
SO Diabete & Metabolisme, (1996) Vol. 22, No. 2, pp. 94-104.
ISSN: 0338-1684.
DT General Review
LA English
SL English; French
AB The hormone insulin remains the cornerstone of ***diabetic*** therapy since it is required for almost all cases of Type 1 and many cases of Type 2 ***diabetes*** . Since the discovery of insulin in 1921, much has been learned about its chemistry, structure and action as well as its production in the beta cell. Insulin is formed through a series of precursors, beginning with preproinsulin, the protein encoded in the insulin gene. These precursors direct the prohormone into the secretory pathway and ultimately into the secretory granules where it is converted into insulin and C-peptide. These products are stored and secreted together in a highly regulated manner in response to glucose and other stimuli. This ***review*** focuses on the recently discovered prohormone convertases, PC2 and PC3 (PC1), the enzymes responsible for the endoproteolytic processing of proinsulin to insulin and C-peptide in the beta cell as well as for the selective processing of proglucagon to glucagon in the alpha cell or GLP1 in intestinal L-cells. PC2 and PC3 are calcium-dependent serine proteases related to the bacterial enzyme subtilisin. They cleave selectively at Lys-Arg or Arg-Arg sites in precursors, generating products with C-terminal basic residues that are then removed by ***carboxypeptidase*** E, an exopeptidase. All 3 enzymes are expressed mainly in secretory granules of neuroendocrine cells throughout the body and in the brain. Inherited defects affecting the prohormone-processing enzymes have recently been found in association with unusual syndromes of obesity and other metabolic disorders.

L26 ANSWER 3 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000272349 EMBASE
TI Erectile dysfunction: A multifaceted disorder.
AU Wierman M.E.; Cassel C.K.
CS Dr. M.E. Wierman, Univ. of Colorado Hlth. Sci. Center, Denver, CO, United States
SO Hospital Practice, (15 Oct 1998) 33/10 (65-90).
Refs: 7
ISSN: 8750-2836 CODEN: HOPRBW
CY United States
DT Journal; General Review
FS 003 Endocrinology
028 Urology and Nephrology
037 Drug Literature Index
038 Adverse Reactions Titles
LA English
SL English
AB The cause may be vascular, neurogenic, hormonal, drug-related, psychogenic, or a combination thereof. In older men in particular, underlying causes may include life-threatening disorders. Evaluation requires directed questioning, since men often fail to volunteer important related symptoms. Clinical findings guide laboratory testing and treatment is tailored to the etiology.

L26 ANSWER 4 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000271290 EMBASE
TI Rational approaches to heart attack prevention.
AU Mensah G.A.
CS Dr. G.A. Mensah, Cardiovascular Care, VA Medical Center, 1 Freedom Way, Augusta, GA 30904, United States
SO Cardiovascular Reviews and Reports, (1999) 20/10 (523-534).
Refs: 18
ISSN: 0197-3118 CODEN: CRRPD4
CY United States
DT Journal; General Review
FS 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA English
SL English
AB Coronary heart disease (CHD) is the major cause of premature mortality and morbidity in adults who live in developed countries. Recent evidence suggests that together with stroke, CHD is likely to become the leading cause of death and disability in adults worldwide. In patients fortunate enough to survive a first heart attack, the majority never make a complete recovery and a substantial proportion die of another heart attack within a year. The prevention of CHD events is thus a major public health priority. The cornerstone of CHD prevention is the timely detection and evaluation of the established risk factors. Using available charts, clinicians can calculate an individual patient's hazard of coronary death as a guide to the urgency and intensity of intervention. Matching the level of risk to the intensity and urgency of intervention provides a rational approach for preventing CHD. Samples of coronary risk calculators and published guidelines for CHD prevention are discussed.

L26 ANSWER 5 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000267874 EMBASE
TI ***Diabetes*** and hypertension: A dynamic duo revisited.
AU Victorina W.M.; Jacober S.J.; Sowers J.R.
CS Dr. J.R. Sowers, Endocrin., Metabol./Hyperten. Div., Wayne State Univ. School of Medicine, 4201 St. Antoine, Detroit, MI 48201, United States
SO Cardiovascular Reviews and Reports, (1999) 20/12 (635-638).
Refs: 28
ISSN: 0197-3118 CODEN: CRRPD4
CY United States
DT Journal; General Review
FS 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA English
SL English
AB ***Diabetes*** is a complex disease with multiple metabolic abnormalities that substantially affect the cardiovascular system. Approximately 80% of excess mortality of ***diabetic*** patients is attributable to cardiovascular disease. The picture is further complicated by the fact that ***diabetes*** often coexists with hypertension, another major risk factor for cardiovascular disease. Over the last decade an impressive body of evidence has been generated that underscores the importance of optimal blood pressure control in patients with hypertension and the improvement in cardiovascular outcome in the population of patients with coexisting ***diabetes*** is even more impressive. There is also evidence that the optimal blood pressure management in the ***diabetic*** patient includes a lower blood pressure goal. At present it seems that the benefit of treatment is more a function of the degree of blood pressure lowering than the effect of any specific pharmacologic agent(s) or group(s) of agent(s). To attain adequate blood pressure control a combination therapy will often be necessary.

L26 ANSWER 6 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000267313 EMBASE
TI [Guideline for antihypertensive therapy in ***diabetic*** hypertensive patients].
LINEE GUIDA DELLA TERAPIA ANTIPERTENSIVA NELL'IPERTESO ***DIABETICO***
AU Mancia G.; Grassi G.
CS Prof. G. Mancia, Cattedra di Medicina Interna, Universita degli Studi di Milano, Ospedale S. Gerardo dei Tintori, Via Donizetti 106, 20052 Monza (MI), Italy
SO Annali Italiani di Medicina Interna, Supplement, (1998) 13/2 (100S-105S).
Refs: 23
ISSN: 1122-0538 CODEN: AIMSF7

CY Italy
DT Journal; Conference Article
FS 003 Endocrinology
006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA Italian
SL English; Italian
AB Several controlled intervention trials performed in the past have unequivocally shown that the reduction of elevated blood pressure values is accompanied by a marked decrease in cardiovascular morbidity and mortality associated with hypertension. The clinical benefits of antihypertensive treatment have been demonstrated not only in severe hypertension, mild-to- moderate hypertension or in hypertension of the elderly, but also in the hypertensive condition frequently observed in the ***diabetic*** disease. This paper will ***review*** the scientific evidences showing the benefits of antihypertensive treatment in the hypertensive patient without or with ***diabetes*** mellitus. This will be followed by a discussion of some important clinical issues such as 1) the choice of antihypertensive drugs to be employed in ***diabetic*** hypertensive patients, 2) the goal blood pressure values to be achieved during treatment and 3) the modern therapeutic strategies to be followed in order to obtain an adequate blood pressure control in ***diabetic*** hypertensives, which are characterized by a high risk cardiovascular profile.

L26 ANSWER 7 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000206383 EMBASE
TI Recent concept of ***diabetic*** nephropathy.
CS Dr. S. Islam, Department of Nephrology, BSMMU, Dhaka
SO Bangladesh Renal Journal, (1999) 18/2 (50-52).
Refs: 22
ISSN: 1015-0889 CODEN: BRJOEJ
CY Bangladesh
DT Journal; General Review
FS 003 Endocrinology
005 General Pathology and Pathological Anatomy
028 Urology and Nephrology
LA English

L26 ANSWER 8 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000118039 EMBASE
TI Gender differences in acute myocardial infarction: The University of Wisconsin experience.
AU Hendricks A.S.; Goodman B.; Stein J.H.; Carnes M.
CS Dr. M. Carnes, Center Women's Health, Women's Health Research, University of Wisconsin, 202 S Park St, Madison, WI 53715, United States. mlcarnes@facstaff.wisc.edu
SO Wisconsin Medical Journal, (1999) 98/8 (30-33+36).
Refs: 20
ISSN: 0043-6542 CODEN: WMJOA7
CY United States
DT Journal; Article
FS 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA English
SL English
AB Objective: To investigate gender difference in baseline characteristics, presentation, and treatment of patients with acute myocardial infarction (MI) admitted to the University of Wisconsin Hospital Coronary Care Unit (CCU) over a 1-year period. Methods: A retrospective ***review*** was performed on the charts of all patients (n = 293) admitted to the CCU in 1996 with a discharge diagnosis of acute MI. In 83 women and 187 men with analyzable data (n = 270), 42 factors related to baseline characteristics, presentation, treatment, and outcomes were identified and analyzed for gender differences. Results: On average, women 5 years older than men (p<.01). By univariate comparison, women were less likely than men to be smokers (p<.001); more likely to have underlying hypertension (p<.01), ***diabetes*** mellitus (p,0.05), non-Q-wave infarctions (p<.01), and congestive heart failure (CHF, p<.05); and more likely to have received diuretics (p<.001) and ACE inhibitors (p<.01). While women were less likely than men to undergo coronary angiography (p<.05) and more likely to have echocardiograms (p<0.05), rates of coronary artery by pass grafts surgery, angioplasty, and the use of thrombolytics were similar for men and women. Clinical outcomes were similar in both groups. CHF, hypertension, and use of ACE inhibitors remained the only significant gender differences when data were adjusted for age. Conclusion: Comparing men and women with acute MI at UW Hospital revealed some differences in clinical characteristics and management. Except for CHF, hypertension, and use of ACE inhibitors (all of which may be related), these differences disappeared when the data were adjusted for age. This is particularly notable the disappearance of the difference in the use of coronary angiography between men and women. The comparable use of beta- blockers, aspirin, and nitrates, and the similar clinical outcomes in men and women, suggest less gender difference in MI management at UW Hospital than reported in other studies.

L26 ANSWER 9 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000116220 EMBASE
TI 'Complicated' hypertension: Update on therapy.
AU Phillips R.A.
SO Consultant, (1999) 39/10 (2663-2672).
Refs: 26
ISSN: 0010-7069 CODEN: CNSLAY
CY United States
DT Journal; General Review
FS 018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA English
SL English
AB The current paradigm for treatment is based on the concept of total risk, not just sphygmomanometer readings. Controlling hypertension is particularly important in patients who are elderly or who have ***diabetes*** mellitus. In general, uncomplicated hypertension in the elderly can be managed most effectively and inexpensively with diuretics; however, .beta.- blockers are preferred for elderly patients with a history of myocardial infarction. In ***diabetic*** patients, diuretics and .beta.-blockers can reduce the risk of cardiovascular disease; angiotensin-converting enzyme inhibitors may limit the progression of renal disease in patients with ***diabetes*** and renal dysfunction. Blood pressure reduction alone appears to be crucial for preventing stroke and heart failure in hypertensive patients, and the specific drug choice may not be of primary importance. Lifestyle modifications to prevent or control hypertension include weight loss, moderate alcohol intake, increased physical activity, and reduced sodium intake.

L26 ANSWER 10 OF 760 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2000104645 EMBASE
TI ***Diabetes*** and myocardial infarction.
AU Fisher M.
CS Dr. M. Fisher, Royal Alexandra Hospital, Corsebar Road, Paisley PA2 9PN, United Kingdom
SO Bailliere's Best Practice and Research in Clinical Endocrinology and Metabolism, (1999) 13/2 (331-343).
Refs: 56
ISSN: 1521-690X CODEN: BBPMFY
CY United Kingdom
DT Journal; General Review
FS 003 Endocrinology
006 Internal Medicine
018 Cardiovascular Diseases and Cardiovascular Surgery
037 Drug Literature Index
LA English
SL English
AB Myocardial infarction (MI) is a common cause of mortality in people with ***diabetes*** . The case fatality from MI is high and may be reduced by thrombolysis and treatment with aspirin, betablockers and angiotensin-converting enzyme inhibitors. Poor metabolic control is common among ***diabetic*** patients with MI, but the importance of controlling blood glucose during and following an MI is debatable. Treatment with statins reduces cardiovascular end-points in ***diabetic*** patients with previous MI (secondary prevention). Large studies in ***diabetic*** patients without existing heart disease have shown statistically insignificant reductions in heart disease and MI with improved glycaemic control of the ***diabetes*** (primary prevention). The treatment of hypertension in people with ***diabetes*** prevents cardiovascular end-points, and studies on whether the treatment of hyperlipidaemia reduces heart disease and MI are proceeding.

=> d his

(FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1 628 S CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR C
L2 4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRAN
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)
L4 590 S L1 AND PY<=2000
L5 564 DUP REM L4 (26 DUPLICATES REMOVED)
L6 12 S CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR CPX2
L7 12 DUP REM L6 (0 DUPLICATES REMOVED)
L8 222 S METALLOCARBOXYPEPTIDASE?
L9 27 S L1 (3A) X2
L10 0 S L8 (3A)X2
L11 0 S L8 (3A) X2
L12 52596 S CARBOXYPEPTIDASE?
L13 1 S L12 (3A) X2
L14 11 S CPX2
L15 11 DUP REM L14 (0 DUPLICATES REMOVED)
L16 0 S L14 AND DIABET?
L17 0 S L1 AND DIABET?
L18 2 S FUNTION? (3A) BIOLOG?
L19 35198 S FUNCTION? (3A) BIOLOG?
L20 0 S L1 AND L19
L21 4 S L8 AND L19
L22 2 DUP REM L21 (2 DUPLICATES REMOVED)
L23 4422 S L12 AND DIABE?
L24 4422 S L12 AND DIABET?
L25 2754 S L24 AND PY<2000
L26 760 S L25 AND REVIEW

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L27 46 L8 AND FUNCTION

=> dup rem l27
PROCESSING COMPLETED FOR L27
L28 21 DUP REM L27 (25 DUPLICATES REMOVED)

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YOU HAVE REQUESTED DATA FROM 21 ANSWERS - CONTINUE? Y/(N):y

L28 ANSWER 1 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
1
AN 2002:249356 BIOSIS
DN PREV200200249356
TI Purification and characterization of arginine carboxypeptidase produced by Porphyromonas gingivalis.
AU Masuda, Kaname; Yoshioka, Masami; Hinode, Daisuke; Nakamura, Ryo (1)
CS (1) Department of Preventive Dentistry, School of Dentistry, University of Tokushima, 18-15 Kuramotocho-3 Chome, Tokushima, 770-8504: nakamura@dent.tokushima-u.ac.jp Japan
SO Infection and Immunity, (April, 2002) Vol. 70, No. 4, pp. 1807-1815. print.
ISSN: 0019-9567.
DT Article
LA English
AB Arginine carboxypeptidase was isolated from the cytoplasm of Porphyromonas gingivalis 381 and purified by DEAE-Sephacel column chromatography, followed by high-performance liquid chromatography on DEAE-5PW and TSK G2000SWXL. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis of the purified enzyme revealed the presence of three major bands at 42, 33, and 32 kDa with identical N-terminal sequences. By Western blotting analysis and immunoelectron microscopy, the arginine carboxypeptidase was found to be widely distributed in the cytoplasm and on the surface of the outer membrane. The open reading frame corresponding to the N-terminal amino acids of the arginine carboxypeptidase was detected by a search of the sequence of the P. gingivalis W83 genome. This sequence showed homology with mammalian carboxypeptidases (M, N, and E/H) and included a zinc-binding region signature, suggesting that the enzyme is a member of the zinc carboxypeptidase family. The purified enzyme was inhibited by EGTA, o-phenanthroline, DL-2-mercaptomethyl-3-guanidinoethylthiopropanoic acid, and some metal ions, such as Cu2+, Zn2+, and Cd2+. On the other hand, Co2+ activated the enzyme. The enzyme released arginine and/or lysine from biologically active peptides containing these amino acids at the C terminus but did not cleave substrates when proline was present at the penultimate position. These results indicate that the arginine carboxypeptidase produced by P. gingivalis is an exo type of ***metallocarboxypeptidase*** . This enzyme may ***function*** to release arginine in collaboration with an arginine aminopeptidase, e.g., Arg-gingipain, to obtain specific amino acids from host tissues during the growth of P. gingivalis.

L28 ANSWER 2 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.
AN 2002:354419 BIOSIS
DN PREV200200354419
TI ***Function*** and release of angiotensin 1-9 and 1-7 by serine- and ***metallocarboxypeptidases*** .
AU Jackman, Herbert (1); Massad, Malek; Sekosan, Marin; Tan, Fulong; Brovkovych, Viktor (1); Marcic, Branislav (1); Erdos, Ervin
CS (1) Pharmacology, Coll. of Med., Univ. of Illinois, 835 S Wolcott Ave., MC 868, Chicago, IL, 60612-7344 USA
SO FASEB Journal, (March 20, 2002) Vol. 16, No. 4, pp. A571. http://www.fasebj.org/. print.
Meeting Info.: Annual Meeting of the Professional Research Scientists on Experimental Biology New Orleans, Louisiana, USA April 20-24, 2002
ISSN: 0892-6638.
DT Conference
LA English
AB Human heart tissue enzymes cleave angiotensin (Ang) I to release Ang 1-9, Ang II or Ang 1-7. In atrial homogenates, cathepsin A (CATA) is the major enzyme (65%) to liberate Ang 1-9. Ang 1-7 was released (88-100%) by a metallopeptidase. Ang II was liberated to about equal degrees by ACE and chymase-type enzymes. CATA in heart deamidated enkephalinamide. It was immunoprecipitated with antiserum to rCATA. In immunohistochemistry, CATA was detected in myocytes of atrial tissue. Ang 1-7 and Ang 1-9 potentiated the ACE-resistant bradykinin analogue's (BK) effect on B2 receptor in transfected cells expressing human ACE and B2 and in endothelial cells. The peptides augmented arachidonic acid and NO release by BK. NO liberation was potentiated at 10 nM concentration 2.4- and 2.1-fold. At 100 nM and 1 muM, Ang 1-9 was significantly more active than Ang 1-7, (3.8 v. 2.6 and 5 v. 4-fold). Without BK, peptides had only a trace of activity. Thus, Ang 1-7 and Ang 1-9 potentiated BK action on the B2 receptor at much lower concentrations than their IC50's with ACE indicate, possibly by inducing a conformational change in the ACE/B2 receptor complex.

L28 ANSWER 3 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
2
AN 2002:317683 BIOSIS
DN PREV200200317683
TI ACEH/ACE2 is a novel mammalian ***metallocarboxypeptidase*** and a homologue of angiotensin-converting enzyme insensitive to ACE inhibitors.
AU Turner, Anthony J. (1); Tipnis, Sarah R.; Guy, Jodie L.; Rice, Gillian I.; Hooper, Nigel M.
CS (1) Proteolysis Research Group, School of Biochemistry and Molecular Biology, University of Leeds, Leeds, LS2 9JT: a.j.turner@leeds.ac.uk UK
SO Canadian Journal of Physiology and Pharmacology, (April, 2002) Vol. 80, No. 4, pp. 346-353. print.
ISSN: 0008-4212.
DT Article
LA English
AB A human zinc metalloprotease (termed ACEH or ACE2) with considerable homology to angiotensin-converting enzyme (ACE) (EC 3.4.15.1) has been identified and subsequently cloned and functionally expressed. The translated protein contains an N-terminal signal sequence, a single catalytic domain with zinc-binding motif (HEMGH), a transmembrane region, and a small C-terminal cytosolic domain. Unlike somatic ACE, ACEH functions as a carboxypeptidase when acting on angiotensin I and angiotensin II or other peptide substrates. ACEH may ***function*** in conjunction with ACE and neprilysin in novel pathways of angiotensin metabolism of physiological significance. In contrast with ACE, ACEH does not hydrolyse bradykinin and is not inhibited by typical ACE inhibitors. ACEH is unique among mammalian carboxypeptidases in containing an HEXXH zinc motif but, in this respect, resembles a bacterial enzyme, Thermus aquaticus (Taq) carboxypeptidase (EC 3.4.17.19). Collectrin, a developmentally regulated renal protein, is homologous with the C-terminal region of ACEH but has no similarity with ACE and no catalytic domain. Thus, the ACEH protein may have evolved as a chimera of a single ACE-like domain and a collectrin domain. The collectrin domain may regulate tissue response to injury whereas the catalytic domain is involved in peptide processing events.

L28 ANSWER 4 OF 21 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 2002100040 EMBASE
TI Structure of the human carboxypeptidase M gene. Identification of a proximal GC-rich promoter and a unique distal promoter that consists of repetitive elements.
AU Li J.; Rehli M.; Timblin B.; Tan F.; Krause S.W.; Skidgel R.A.
CS R.A. Skidgel, Department of Pharmacology, Univ. of Illinois Coll. of Medicine, 835 S. Wolcott, Chicago, IL 60612, United States. rskidgel@uic.edu
SO Gene, (6 Feb 2002) 284/1-2 (189-202).
Refs: 35
ISSN: 0378-1119 CODEN: GENED6
PUI S 0378-1119(01)00898-8
CY Netherlands
DT Journal; Article
FS 022 Human Genetics
029 Clinical Biochemistry
LA English
SL English
AB The human carboxypeptidase M (CPM) gene was found to encompass .apprx.112.6 kb of genomic sequence, containing 11 exons of which eight (exons 2-9) are common to all transcripts and contain the entire coding region. We have cloned several alternative variants of CPM transcripts that result from differential promoter usage and alternative splicing. Although CPM belongs to the same ***metallocarboxypeptidase*** subfamily as CPE, their intron/exon structures differ significantly. Multiple transcription start sites were found in the CPM gene that cluster in two regions separated by .apprx.30 kb and are flanked by two unique functional promoters. One ('proximal') is immediately upstream of the coding region and contains GC-rich sequences and a typical TATA box whereas the other ('distal') consists almost entirely of repetitive elements. Luciferase reporter assays with constructs of the promoter regions showed they were both quite active in several cell lines. However, the proximal promoter was much stronger than the distal one in two of the human cell lines tested (HepG2 and HEK293) whereas both promoters were highly and equally active in the human monocytic cell line THP-1, which has high constitutive expression of CPM. .COPYRGT. 2002 Elsevier Science B.V. All rights reserved.

L28 ANSWER 5 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
3
AN 2002:141469 BIOSIS
DN PREV200200141469
TI Carboxypeptidases from A to Z: Implications in embryonic development and Wnt binding.
AU Reznik, S. E. (1); Fricker, L. D.
CS (1) Department of Pathology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY, 10461: sreznik@aecom.yu.edu USA
SO CMLS Cellular and Molecular Life Sciences, (November, 2001) Vol. 58, No. 12-13, pp. 1790-1804. http://link.springer.de/link/service/journals/00018/. print.
ISSN: 1420-682X.
DT General Review
LA English
AB Carboxypeptidases perform many diverse functions in the body. The well-studied pancreatic enzymes (carboxypeptidases A1, A2 and B) are involved in the digestion of food, whereas a related enzyme (mast-cell carboxypeptidase A) functions in the degradation of other proteins. Several members of the ***metallocarboxypeptidase*** gene family (carboxypeptidases D, E, M and N) are more selective enzymes and are thought to play a role in the processing of intercellular peptide

messengers. Three other members of the ***metallocarboxypeptidase*** gene family do not appear to encode active enzymes; these members have been designated CPX-1, CPX-2 and AEBP1/ACLP. In this review, we focus on the recently discovered carboxypeptidase Z (CPZ). This enzyme removes C-terminal Arg residues from synthetic substrates, as do many of the other members of the gene family. However, CPZ differs from the other enzymes in that CPZ is enriched in the extracellular matrix and is broadly distributed during early embryogenesis. In addition to containing a ***metallocarboxypeptidase*** domain, CPZ also contains a Cys-rich domain that has homology to Wnt-binding proteins; Wnts are important signaling molecules during development. Although the exact ***function*** of CPZ is not yet known, it is likely that this protein plays a role in development by one of several possible mechanisms.

L28 ANSWER 6 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
4
AN 2001:279378 BIOSIS
DN PREV200100279378
TI ***Metallocarboxypeptidase*** Z is dynamically expressed in mouse development.
AU Novikova, Elena; Fricker, Lloyd D.; Reznik, Sandra E. (1)
CS (1) Department of Pathology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Forchheimer, Second Floor, Bronx, NY, 10461-2373: sreznik@aecom.yu.edu USA
SO Mechanisms of Development, (April, 2001) Vol. 102, No. 1-2, pp. 259-262. print.
ISSN: 0925-4773.
DT Article
LA English
SL English
AB ***Metallocarboxypeptidase*** Z (CPZ), a new member of the regulatory ***metallocarboxypeptidases*** , contains a 120-residue cysteine-rich region that has 20-35% amino acid sequence identity to Drosophila and mammalian frizzled proteins. In order to gain insights into the ***function*** of CPZ, we have examined the distribution of the protein by immunohistochemistry throughout mouse development. The expression of CPZ peaks at E9-E12, decreases in late gestation and falls further in adult tissues. CPZ expression in amnion cells, cochlear epithelial cells and surrounding mesenchyme, ventricular lining cells in the brain and cartilagenous condensations and surrounding connective tissue in ribs remains at high levels throughout mouse gestation. The expression pattern of CPZ overlaps with the expression pattern of several Wnt genes, consistent with the putative role of CPZ in Wnt signaling.

L28 ANSWER 7 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
5
AN 2000:334503 BIOSIS
DN PREV200000334503
TI Carboxypeptidase Z is present in the regulated secretory pathway and extracellular matrix in cultured cells and in human tissues.
AU Novikova, Elena G.; Reznik, Sandra E.; Varlamov, Oleg; Fricker, Lloyd D. (1)
CS (1) Dept. of Molecular Pharmacology, Albert Einstein College of Medicine, 1300 Morris Park Ave., Bronx, NY, 10461 USA
SO Journal of Biological Chemistry, (February 18, 2000) Vol. 275, No. 7, pp. 4865-4870. print.
ISSN: 0021-9258.
DT Article
LA English
SL English
AB Carboxypeptidase Z (CPZ) is a newly reported member of the ***metallocarboxypeptidase*** gene family, but unlike other members of this family, CPZ contains an N-terminal domain that has amino acid sequence similarity to Wnt-binding proteins. In order to gain insights as to the potential ***function*** of CPZ, the intracellular localization of this protein was determined in cell culture and in human tissues. When expressed in the AtT-20 mouse pituitary cell line, CPZ protein is routed to the regulated secretory pathway and secreted upon stimulation. A fraction of the secreted CPZ remains associated with the extracellular matrix. Endogenous CPZ in the PC12 rat pheochromocytoma cell line is also associated with the extracellular matrix. In human placenta, CPZ is present within invasive trophoblasts and in the surrounding extracellular space, indicating an association with extracellular matrix. CPZ is also present in amnion cells, but is not readily apparent in the extracellular matrix of this cell type. A human adenocarcinoma of the colon shows expression of CPZ in the extracellular matrix adjacent to malignant cells. Taken together, CPZ appears to be a component of the extracellular matrix in some cell types, where it may ***function*** in the binding of Wnt.

L28 ANSWER 8 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
6
AN 2000:233511 BIOSIS
DN PREV200000233511
TI ***Metallocarboxypeptidases*** and their protein inhibitors: Structure, ***function*** and biomedical properties.
AU Vendrell, Josep; Querol, Enrique; Aviles, Francesc X. (1)
CS (1) Departament de Bioquimica i Biologia Molecular, Facultat de Ciencies, Institut de Biologia Fonamental, Universitat Autonoma de Barcelona, E-08193, Bellaterra Spain
SO Biochimica et Biophysica Acta, (March 7, 2000) Vol. 1477, No. 1-2, pp. 284-298.
ISSN: 0006-3002.
DT General Review
LA English
SL English
AB Among the different aspects of recent progress in the field of ***metallocarboxypeptidases*** has been the elucidation of the three dimensional structures of the pro-segments (in monomeric or oligomeric species) and their role in the expression, folding and inhibition/activation of the pancreatic and pancreatic-like forms. Also of great significance has been the cloning and characterization of several new regulatory carboxypeptidases, enzymes that are related with important functions in protein and peptide processing and that show significant structural differences among them and also with the digestive ones. Many regulatory carboxypeptidases lack a pro-region, unlike the digestive forms or others in between from the evolutionary point of view. Finally, important advances have been made on the finding and characterization of new protein inhibitors of ***metallocarboxypeptidases*** , some of them with interesting potential applications in the biotechnological/biomedical fields. These advances are analyzed here and compared with the earlier observations in this field, which was first explored by Hans Neurath and collaborators.

L28 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1999:241709 CAPLUS
DN 131:41356
TI Cloning, expression, and substrate specificity of MeCPA, a zinc carboxypeptidase that is secreted into infected tissues by the fungal entomopathogen Metarhizium anisopliae
AU Joshi, Lokesh; St. Leger, Raymond J.
CS Boyce Thompson Institute at Cornell University, Ithaca, NY, 14853, USA
SO Journal of Biological Chemistry (1999), 274(14), 9803-9811
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB To date zinc carboxypeptidases have only been found in animals and actinomycete bacteria. A cDNA clone (MeCPA) for a novel fungal (Metarhizium anisopliae) carboxypeptidase (MeCPA) was obtained by using reverse transcription differential display polymerase chain reaction to identify pathogenicity genes. MeCPA resembles pancreatic carboxypeptidases in being synthesized as a precursor species (418 amino acids) contg. a large amino-terminal fragment (99 amino acids). The mature (secreted) form of MeCPA shows closest amino acid identity to human carboxypeptidases A1 (35%) and A2 (37%). MeCPA was expressed in an insect
cell line yielding an enzyme with dual A1 + A2 specificity for branched aliph. and arom. COOH-terminal amino acids. However, in contrast to the very broad spectrum A + B-type bacterial enzymes, MeCPA lacks B-type activity against charged amino acids. This is predictable as key catalytic residues detg. the specificity of MeCPA are conserved with those of mammalian A-type carboxypeptidases. Thus, in evolutionary terms the fungal enzyme is an intermediate between the divergence of A and B forms and the differentiation of the A form into A1 and A2 isoforms. Ultrastructural immunocytochem. of infected host (Manduca sexta) cuticle demonstrated that MeCPA participates with the concurrently produced endoproteases in procuring nutrients; an equiv. ***function*** to digestive pancreatic enzymes.
RE.CNT 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 10 OF 21 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.
AN 1999075009 EMBASE
TI Identification of mouse CPX-1, a novel member of the ***metallocarboxypeptidase*** gene family with highest similarity to CPX-2.
AU Lei Y.; Xin X.; Morgan D.; Pintar J.E.; Fricker L.D.
CS Dr. L.D. Fricker, Department of Molecular Pharmacology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY 10461, United States
SO DNA and Cell Biology, (1999) 18/2 (175-185).
Refs: 52
ISSN: 1044-5498 CODEN: DCEBE8
CY United States
DT Journal; Article
FS 029 Clinical Biochemistry
LA English
SL English
AB The recent finding that Cpe(fat)/Cpe(fat) mice, which lack carboxypeptidase E (CPE) activity because of a point mutation, are still capable of a reduced amount of neuroendocrine peptide processing suggested that additional carboxypeptidases (CPs) participate in this processing reaction. Searches for novel members of the CPE gene family led to the discovery of CPD, CPZ, AEBP1, and CPX-2. In the present report, we describe mouse CPX-1, another novel member of this gene family. Like AEBP1 and CPX-2, CPX-1 contains an N-terminal region of 160 amino acids with sequence similarity to the discoidin domain of a variety of proteins. The 410-residue CP-like domain of CPX-1 has 54% to 62% amino acid sequence identity with AEBP1 and CPX-2 and 33% to 49% amino acid identity with other members of the CPE subfamily. However, several active-site residues that are important for catalytic activity of other CPs are not conserved in CPX-1. Furthermore, CPX- 1 expressed in either the baculovirus system

or the mouse AtT-20 cell line does not cleave standard CP substrates. Northern blot analysis showed the highest levels of CPX-1 mRNA in testis and spleen and lower levels in salivary gland, brain, heart, lung, and kidney. In situ hybridization of CPX- 1 mRNA in embryonic and fetal mouse tissue showed expression throughout the head and thorax, with abundance in primordial cartilage and skeletal structures. In the head, high levels of CPX-1 mRNA were associated with the nasal mesenchyme, primordial cartilage structures in the ear, and the meninges. In the thorax, CPX-1 mRNA was expressed in multiple developing skeletal structures, including chondrocytes and perichondrial cells of the rib, vertebral, and long-bone primordia. Taken together, these findings suggest that it is unlikely that CPX-1 functions in the processing of neuroendocrine peptides. Instead, CPX-1 may have a role in development, possibly mediating cell interactions via its discoidin domain.

L28 ANSWER 11 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
7
AN 2000:58699 BIOSIS
DN PREV200000058699
TI Elements of the kallikrein-kinin system are present in rat seminiferous epithelium.
AU Monsees, Thomas K. (1); Miska, Werner; Bloecher, Sonja; Schill, Wolf-Bernhard; Winkler, Annett; Siems, Wolf-Eberhard
CS (1) Center of Dermatology and Andrology, Justus Liebig University, Gaffkystr. 14, 35385, Giessen Germany
SO Immunopharmacology, (Dec., 1999) Vol. 45, No. 1-3, pp. 107-114. ISSN: 0162-3109.
DT Article
LA English
SL English
AB Peptide hormones are involved in the paracrine regulation of several physiological processes. A possible ***function*** of the kallikrein-kinin system (KKS) in mammalian reproduction has been discussed. To evaluate its putative role in spermatogenesis, we searched for components of the KKS (kallikrein, kininases, kinin receptor) in the rat testis. Specific immunostaining demonstrated that the kininogenase tissue kallikrein was present in round and elongated spermatids. Leydig cells, Sertoli cells, peritubular cells, spermatogonia and spermatocytes were not stained. Bradykinin in the supernatant of Sertoli cell cultures was effectively degraded. The resulting metabolites were analysed by high-performance liquid chromatography (HPLC). Specific protease inhibition in the degrading experiments confirmed the occurrence of several metalloproteases on Sertoli cell membranes, including neutral metalloendopeptidases (NEP 24.11 and NEP 24.15), kininase type II (angiotensin converting enzyme, ACE), and kininase type I (***metallocarboxypeptidase***). Northern blots hybridized with a bradykinin B2 receptor probe showed the presence of B2 receptor mRNA in testis homogenate and Sertoli cell extract. All components of the kallikrein-kinin system are present within the seminiferous epithelium of the rat. Therefore, this paracrine peptide system may play a role in the regulation of Sertoli cell ***function*** or in the Sertoli cell-germ cell crosstalk.

L28 ANSWER 12 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
8
AN 1999:378064 BIOSIS
DN PREV199900378064
TI Sequences within the cytoplasmic domain of GP180/carboxypeptidase D mediate localization to the trans-Golgi network.
AU Eng, Francis J.; Varlamov, Oleg; Fricker, Lloyd D. (1)
CS (1) Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY, 10461 USA
SO Molecular Biology of the Cell, (Jan., 1999) Vol. 10, No. 1, pp. 35-46. ISSN: 1059-1524.
DT Article
LA English
SL English
AB Gp180, a duck protein that was proposed to be a cell surface receptor for duck hepatitis B virus, is the homolog of ***metallocarboxypeptidase*** D, a mammalian protein thought to ***function*** in the trans-Golgi network (TGN) in the processing of proteins that transit the secretory pathway. Both gp180 and mammalian ***metallocarboxypeptidase*** D are type I integral membrane proteins that contain a 58-residue cytosolic C-terminal tail that is highly conserved between duck and rat. To investigate the regions of the gp180 tail involved with TGN retention and intracellular trafficking, gp180 and various deletion and point mutations were expressed in the AtT-20 mouse pituitary corticotroph cell line. Full length gp180 is enriched in the TGN and also cycles to the cell surface. Truncation of the C-terminal 56 residues of the cytosolic tail eliminates the enrichment in the TGN and the retrieval from the cell surface. Truncation of 12-43 residues of the tail reduced retention in the TGN and greatly accelerated the turnover of the protein. In contrast, deletion of the C-terminal 45 residues, which truncates a potential YxxL-like sequence (FxxL), reduced the protein turnover and caused accumulation of the protein on the cell surface. A point mutation of the FxxL sequence to AxxL slowed internalization, showing that this element is important for retrieval from the cell surface. Mutation of a pair of casein kinase II sites within an acidic cluster showed that they are also important for trafficking. The present study demonstrates that multiple sequence elements within the cytoplasmic tail of gp180 participate in TGN localization.

L28 ANSWER 13 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
9
AN 1999:8285 BIOSIS
DN PREV199900008285
TI Identification of mouse CPX-2, a novel member of the ***metallocarboxypeptidase*** gene family: cDNA cloning, mRNA distribution, and protein expression and characterization.
AU Xin, Xiaonan; Day, Robert; Dong, Weija; Lei, Yinghong; Fricker, Lloyd D. (1)
CS (1) Dep. Molecular Pharmacology, Albert Einstein Coll. Med., 1300 Morris Park Avenue, Bronx, NY 10461 USA
SO DNA and Cell Biology, (Oct., 1998) Vol. 17, No. 10, pp. 897-909. ISSN: 1044-5498.
DT Article
LA English
AB A novel member of the ***metallocarboxypeptidase*** gene family was identified from its homology with carboxypeptidase E and has been designated CPX-2. The cDNA of 2500 nucleotides encodes a protein of 764 amino acids that contains an N-terminal signal peptide-like sequence, a 158-residue discoidin domain, and a 400-residue carboxypeptidase domain. The 400-residue ***metallocarboxypeptidase*** domain has 59% amino acid identity with a protein designated AEBP-1; 44% to 46% identity with carboxypeptidases E, N, and Z; and lower homology with other members of the ***metallocarboxypeptidase*** gene family. The discoidin domain of CPX-2 has 22% amino acid identity with the carbohydrate-binding domain of discoideum-I, 29% to 34% identity with the phospholipid-binding domain of human factors V and VIII, and 59% identity with the discoidin-like domain on AFBP-1. CPX-2 is missing several of the predicted active-site residues that are conserved in most other members of the ***metallocarboxypeptidase*** gene family and which are thought to be required for enzyme activity. Expression of CPX-2 using the baculovirus system produced several forms of protein, from 80 to 105 kDa, but no detectable activity toward a variety of carboxypeptidase substrates. A shorter 50-kDa form of CPX-2, which contains the carboxypeptidase domain but not the discoidin domain, was also inactive when expressed in the baculovirus system. CPX-2 is able to bind to Sepharose-Arg; this binding is blocked by 10 mM Arg. Northern blot analysis showed CPX-2 mRNA in mouse brain, liver, kidney, and lung. In situ hybridization analysis of brain revealed a broad distribution. Areas that are enriched in CPX-2 include the hippocampus, cerebral cortex, median eminence, and choroid plexus. Taken together, these data suggest a widespread ***function*** for CPX-2, possibly as a binding protein rather than an active carboxypeptidase.

L28 ANSWER 14 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
10
AN 1999:16856 BIOSIS
DN PREV199900016856
TI Characterization of the wound-induced ***metallocarboxypeptidase*** inhibitor from potato: cDNA sequence, induction of gene expression, subcellular immunolocalization and potential roles of the C-terminal propeptide.
AU Villaneuva, Josep; Canals, Francesc; Prat, Salome; Ludevid, Dolors; Querol, Enrique; Aviles, Francesc X. (1)
CS (1) Dep. Bioquim., Univ. Autonoma Barcelona, 08193 Bellaterra Spain
SO FEBS Letters, (Nov. 27, 1998) Vol. 440, No. 1-2, pp. 175-182. ISSN: 0014-5793.
DT Article
LA English
AB A partial cDNA clone for the potato wound-inducible ***metallocarboxypeptidase*** inhibitor (PCI) was isolated from a cDNA library constructed from mRNA of abscisic acid (ABA)-treated potato leaves. The full 5' region of the cDNA was obtained through a RACE-PCR protocol. PCI mRNA encodes a precursor polypeptide which comprises a 29 residue N-terminal signal peptide, a 27 residue N-terminal pro-region, the 39 residue mature PCI protein, and a 7 residue C-terminal extension. Northern blot analysis demonstrates that the PCI gene is transcriptionally activated by wounding, and wound signaling can be induced by ABA and jasmonic acid. Subcellular localization of the protein was investigated by immunocytochemistry and electron microscopy, showing that PCI accumulates within the vacuole. A partial PCI precursor form, comprising the mature protein and the C-terminal extension, has been expressed in Escherichia coli and characterized. Its inability to inhibit carboxypeptidases, and stability to carboxypeptidase digestion, suggest that the C-terminal pro-domain may have, besides a probable vacuolar sorting ***function*** , a role in modulation of the inhibitory activity of PCI.

L28 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1999:54723 CAPLUS
DN 130:91941
TI Basic (that cleaved residues arginine and lysine) ***metallocarboxypeptidase*** of mammalian tissues: structure, properties and functions
AU Vernigora, A. N.; Gengin, M. T.
CS Penz. Gos. Pedagog. Univ. im. V.G. Belinskogo, Penza, Russia
SO Ukrainskii Biokhimicheskii Zhurnal (1998), 70(4), 18-24
CODEN: UBZHD4; ISSN: 0201-8470
PB Institut Biokhimii im. A. V. Palladina NAN Ukrainy
DT Journal; General Review
LA Russian

AB A review with 79 refs. The structure, phys., chem. and catalytic properties, functions and biol. role of mammalian basic carboxypeptidases are obsd. Genetic and phylogenetic research data show the existence of a family of basic metal-dependent carboxypeptidases. The connections between structure, localization and ***function*** of this enzyme are discussed.

L28 ANSWER 16 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
11
AN 1994:269514 BIOSIS
DN PREV199497282514
TI Regulation of carboxypeptidase E: Effect of Ca-2+ on enzyme activity and stability.
AU Nalamachu, Srinivas R.; Song, Lixin; Fricker, Lloyd D.
CS Dep. Mol. Pharmacol., Albert Einstein Coll. Med., 1300 Morris Park Ave., Bronx, NY 10461 USA
SO Journal of Biological Chemistry, (1994) Vol. 269, No. 15, pp. 11192-11195. ISSN: 0021-9258.
DT Article
LA English
AB Carboxypeptidase E (CPE), an enzyme that functions in the post-translational processing of bioactive peptides, is a member of the ***metallocarboxypeptidase*** gene family. A 12-residue region of CPE has 70% amino acid identity with the bacterial enzyme carboxypeptidase T (CPT); in CPT, this region has been identified previously as the Ca-2+-binding region (Teplyakov, A., Polyakov, K., Obmolova, G., Strokopytov, B., Kuranova, I., Osterman, A., Grishin, N., Smulevitch, S., Zagnitko, O., Galperina, O., Matz, M., and Stepanov, V. (1992) Eur. J. Biochem. 208, 281-288). Using 45Ca-2+ binding, we determined that CPE binds Ca-2+. To investigate the potential ***function*** for the interaction of CPE with Ca-2+, we investigated the effect of Ca-2+ on aggregation, thermostability, and enzyme activity of CPE. CPE does not aggregate under a variety of Ca-2+ concentrations at either pH 5.5 or 7.5, and with protein concentrations ranging from 10 to 100 mu-g/ml. Whereas Ca-2+ generally stabilizes proteins to thermal denaturation, CPE was destabilized by Ca-2+ and stabilized by low concentrations of EGTA. The Ca-2+-induced destabilization of CPE was more pronounced at pH 8 than at lower pH values. At pH 8, CPE was unstable even at 37 degree C, with approximately 40% loss of activity upon incubation for 30 min in the absence of added Ca-2+ and 70% loss of activity upon incubation in the presence of 10 mM CaCl-2. Enzyme activity was not influenced by added Ca-2+, but was stimulated by micromolar concentrations of EGTA; kinetic analysis showed this stimulation to be due to a change in V-max, and not K-m. Taken together, these data suggest that Ca-2+ plays a role in the regulation of CPE activity.

L28 ANSWER 17 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
12
AN 1994:65656 BIOSIS
DN PREV199497078656
TI Noncholinergic ***function*** of cholinesterases.
AU Balasubramanian, A. S.; Bhanumathy, C. D.
CS Neurochem. Lab., Dep. Neurol. Sci., Christian Med. Coll. and Hosp., Vellore 632 004 India
SO FASEB (Federation of American Societies for Experimental Biology) Journal, (1993) Vol. 7, No. 14, pp. 1354-1358. ISSN: 0892-6638.
DT General Review
LA English
AB Cholinesterases (acetylcholinesterase and butyrylcholinesterase) exhibit additional catalytic activities apart from their well-known action in hydrolyzing choline esters. An amine-sensitive aryl acylamidase activity is exhibited by both acetyl- and butyrylcholinesterases. A ***metallocarboxypeptidase*** -like activity is found associated with both acetyl- and butyrylcholinesterases. The peptidase activity exhibited by butyrylcholinesterase was located in a 50-kDa COOH-terminal fragment. Acetylcholinesterase is implicated in noncholinergic functions in the substantia nigra. A relationship between tumorigenesis, cell differentiation, and cholinesterases has been speculated. The sequence similarities between different esterases, lipases, thyroglobulin, cell adhesion proteins, and cholinesterases would make it appear that cholinesterases are capable of exhibiting more than one biological activity and their functions are wider than what is hitherto known.

L28 ANSWER 18 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
13
AN 1988:377681 BIOSIS
DN BA86:61591
TI ACETYLCHOLINESTERASE UNDERGOES AUTOLYSIS TO GENERATE TRYPSIN-LIKE ACTIVITY.
AU SMALL D H; SIMPSON R J
CS DEP. BIOCHEM., UNIV. MELBOURNE, PARKVILLE, VIC. 3052, AUST.
SO NEUROSCI LETT, (1988) 89 (2), 223-228. CODEN: NELED5. ISSN: 0304-3940.
FS BA; OLD
LA English
AB Acetylcholinesterase (AChE)is one of the most highly studied enzymes, alhtough its ***function*** in many tissues has remained obscure. AChE purified from eel or foetal bovine serum possesses proteolytic activity in addition to esterase activity. The presence of trypsin-like and ***metallocarboxypeptidase*** -like activities associated with AChE accounts for its ability to convert enkephalin peptide precursors into enkephalins. Several lines of evidence indicate that AChE's trypsin-like activity is an integral component of the molecule and that it is activated by autolysis. Incubation of affinity-purified eel AChE generated several fragments of low relative molecular mass (Mr). One of these low Mr fragments (Mr = 25,000 Da, 25K) cleaved from the 70K form of AChE, possessed considerable sequence similarity to the N-terminal sequence of pancreatic trypsin. Autolysis of eel AChE may give rise to a neuropeptide processing enzyme.

L28 ANSWER 19 OF 21 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE
14
AN 1979:234602 BIOSIS
DN BA68:37106
TI CARBOXY PEPTIDASE OF STREPTOMYCES-GRISEUS IMPLICATIONS OF ITS CHARACTERISTICS.
AU BREDDAM K; BAZZONE T J; HOLMQUIST B; VALLEE B L
CS DIV. MED. BIOL., PETER BENT BRIGHAM HOSP., BOSTON, MASS. 02115, USA.
SO BIOCHEMISTRY, (1979) 18 (8), 1563-1570. CODEN: BICHAW. ISSN: 0006-2960.
FS BA; OLD
LA English
AB Carboxypeptidase from S. griseus was isolated by use of a new, highly efficient affinity chromatographic procedure. The enzyme isolated in this manner consists of a single polypeptide chain with a MW of 41,200. It is reversibly inhibited by o-phenanthroline and other metal chelators and contains 1 g-atom of Zn/mol. The absorption and magnetic circular dichroic spectra of the Co-substituted enzyme are virtually identical with those previously observed for bovine carboxypeptidase A. Chemical modification studies suggest the importance of tyrosyl, arginyl and glutamyl residues for catalytic activity, all of which were demonstrated to be essential for the activity of bovine carboxypeptidase A. The S. griseus carboxypeptidase exhibits unique properties not previously observed in other zinc carboxypeptidases. It contains 2 g-atoms of tightly bound Ca which appears to ***function*** in protein stabilization in concert with 2 disulfide bridges. In marked contrast to any of the ***metallocarboxypeptidases*** known presently, the S. griseus enzyme hydrolyzes C-terminal basic peptide substrates and their exact ester analogues with kinetic parameters comparable to those of the corresponding neutral C-terminal substrates. These properties of this bacterial enzyme, combined with its close mechanistic similarity to bovine carboxypeptidase A, suggest that it may be the postulated but yet to be identified intermediate between endopeptidases and the carboxypeptidases.

L28 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1961:131722 CAPLUS
DN 55:131722
OREF 55:24878a-h
TI ***Metallocarboxypeptidases*** : stability constants and enzymic characteristics
AU Coleman, Joseph E.; Vallee, Bert L.
CS Harvard Med. School, Boston, MA
SO J. Biol. Chem. (1961), 236, 2244-9
DT Journal
LA Unavailable
AB cf. CA 54, 13212c; 55, 4619d. Apocarboxypeptidase forms enzymically active complexes with a series of metal ions. The ranking order of stability consts. for the complexes of a series of metal ions with simple ligands is characteristic of its constituent donor atoms. Thus, when N and N or N and O ***function*** in this capacity, the ranking order for the stability consts. of metal complexes follows the sequence Hg(II) > Cu(II) .gtoreq. Ni(II) > Co(II) .gtoreq. Zn(II) .gtoreq. Cd(II) > Fe(II) > Mn(II). The substitution of S for one of the donor atoms, to yield a S-N ligand markedly changes this sequence to Hg(II) .mchgt. Cd(II) > Zn(II) > Ni(II) > Co(II) > Fe(II) > Mn. Cu is indeterminant because of the oxidn. of the mercapto group. The complexes of Cd and Zn are more distinctly stabilized over those of Co and Ni, the characteristic feature of the S-ligand series. The close correlation of both the order and magnitudes of the consts. imply that in carboxypeptidase a N-S site binds metal ions to yield enzymic activity. This interpretation is supported by titrations showing 2 metal-binding groups with pK values of 7.7 and 9.1, resp., compatible with published values for .alpha.-amino and SH groups. Mn, Co, Ni, and Zn carboxypeptidase hydrolyze both peptides and an ester substrate, hippuryl-DL,-.beta.-phenyllactate. The ranking order of peptidase activities for these metal atoms varies as a ***function*** of the primary structure of the synthetic peptide substrate. Hg, Cd, and Pd carboxypeptidases exhibit marked esterase activity but do not hydrolyze the synthetic peptides tested. Thus, the metal atom known to ***function*** in substrate binding also plays a role in the detn. of enzymic specificity. The role of metal ions in the action of carboxypeptidase is apparent in yet another manner. Under standard conditions of assay, the relative order of the catalytic efficiencies of different ***metallocarboxypeptidases*** varies as a ***function*** of the primary structure of the synthetic peptide substrate. Thus the ranking order Co > Ni > Zn > Mn observed for carbobenzyloxyglycyl-L-phenylalanine is confirmed and is preserved over a wide range of substrate concns., ionic strengths, and other conditions of assay, but is inverted to Zn > Co > Ni > Mn for both carbobenzyloxyglycyl-L-tryptophan and

benzoylglycyl-L-phenylalanine, and also the ester substrate, hippuryl-DL-.beta.-phenylacetate. The spectral changes accompanying the formation of Co carboxypeptidase show the formation of a mercaptide linkage with apocarboxypeptidase. Co carboxypeptidase exhibits a distinctive red color with an absorption max. at 530 m.mu. and an extinction coeff. of 150. The shift in the absorption max. from 512 in the hydrated Co(II) to 530 m.mu. in Co carboxypeptidase, together with the increase in the extinction coeff. from 10 to 150, suggest binding to S. Similar binding of Ni, Mn, Hg, and Cd to a S atom is indicated by the relative order of the stability consts. for the resp. ***metallocarboxypeptidases*** which follow that expected for a S-contg. ligand. The S-N nature of the bidentate binding site is implied by the magnitude of the stability consts. and by the release of 2 H ions on combination of the apoenzyme with Zn ions. Equil. dialysis expts. in which the Zn atom of carboxypeptidase is exchanged for Hg or Cd demonstrate that the same site of the enzyme is involved in binding all of these, as shown previously for Co. The evidence suggests that the active center of native carboxypeptidase A includes 1 S, 1 N, and 1 Zn atom.

L28 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2002 ACS
AN 1960:68574 CAPLUS
DN 54:68574
OREF 54:13212c-f
TI ***Metallocarboxypeptidases***
AU Coleman, Joseph E.; Vallee, Bert L.
CS Harvard Med. School, Boston, MA
SO J. Biol. Chem. (1960), 235, 390-5
DT Journal
LA Unavailable
AB cf. CA 54, 8947h. Removal of Zn from carboxypeptidase produces an inactive, metal-free apoenzyme. Activity can be restored to the apoenzyme by Zn, Co(II), Ni(II), Mn, and Fe(II). The restoration is a ***function*** of pH for all the ions and is characteristic for each. At pH 8.0 with 0.02M carbobenzyloxyglycyl-L-phenylalanine as the substrate, the magnitude of the activity restored as the proteolytic coeff. C is in the order Co(II) > Ni(II) > Zn > Mn > Fe(II). The Co enzyme has from 180 to 220 and the Ni enzyme 110-130% of the Zn enzyme under these conditions. Between pH 6 and 10 Co and Ni carboxypeptidase are much more sensitive to pH than are the Zn and Mn enzymes. Although the apoenzyme has at least 2 sites of binding for Zn, only the binding to one of them results in activity. One g. atom/ mole of Co, Ni, and Mn is bound to the apoenzyme at the pH of max. activity of each of these ***metallocarboxypeptidases*** . Equil. dialysis indicates that Co and Zn occupy the same site on the enzyme surface, since they displace one another. At pH 8 and 4.degree. the apparent dissocn. const. in M NaCl, 0.05M tris (hydroxymethyl)aminomethane, 0.05M NaOAc buffer, of the Zn carboxypeptidase, 4.7 .+-. 0.5 .times. 10-9M, is 1/300 that of Co carboxypeptidase, 1.50 .+-. 0.07 .times. 10-6M. Zn displaces Co faster and at lower Zn concns. than those observed for the reverse reaction.

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(FILE 'HOME' ENTERED AT 16:53:45 ON 24 OCT 2002)

FILE 'BIOSIS, EMBASE, CAPLUS' ENTERED AT 16:54:11 ON 24 OCT 2002
L1 628 S CX2 OR CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR C
L2 4 S L1 AND (DEFICIEN? OR DISRUPT? OR KNOCKOUT OR KNOCKOUT OR TRAN
L3 4 DUP REM L2 (0 DUPLICATES REMOVED)
L4 590 S L1 AND PY<=2000
L5 564 DUP REM L4 (26 DUPLICATES REMOVED)
L6 12 S CARBOXYPEPTIDASE X2 OR METALLOCARBOXYPEPTIDASE X2 OR CPX2
L7 12 DUP REM L6 (0 DUPLICATES REMOVED)
L8 222 S METALLOCARBOXYPEPTIDASE?
L9 27 S L1 (3A) X2
L10 0 S L8 (3A)X2
L11 0 S L8 (3A) X2
L12 52596 S CARBOXYPEPTIDASE?
L13 1 S L12 (3A) X2
L14 11 S CPX2
L15 11 DUP REM L14 (0 DUPLICATES REMOVED)
L16 0 S L14 AND DIABET?
L17 0 S L1 AND DIABET?
L18 2 S FUNTION? (3A) BIOLOG?
L19 35198 S FUNCTION? (3A) BIOLOG?
L20 0 S L1 AND L19
L21 4 S L8 AND L19
L22 2 DUP REM L21 (2 DUPLICATES REMOVED)
L23 4422 S L12 AND DIABE?
L24 4422 S L12 AND DIABET?
L25 2754 S L24 AND PY<2000
L26 760 S L25 AND REVIEW
L27 46 S L8 AND FUNCTION
L28 21 DUP REM L27 (25 DUPLICATES REMOVED)

=> s l8 and reivew
L29 0 L8 AND REIVEW

=> s l8 and review
L30 16 L8 AND REVIEW

=> dup rem l30
PROCESSING COMPLETED FOR L30
L31 8 DUP REM L30 (8 DUPLICATES REMOVED)

=> d bib abs 1-
YOU HAVE REQUESTED DATA FROM 8 ANSWERS - CONTINUE? Y/(N):y

L31 ANSWER 1 OF 8 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 1
AN 2002:141469 BIOSIS
DN PREV200200141469
TI Carboxypeptidases from A to Z: Implications in embryonic development and Wnt binding.
AU Reznik, S. E. (1); Fricker, L. D.
CS (1) Department of Pathology, Albert Einstein College of Medicine, 1300 Morris Park Avenue, Bronx, NY, 10461: sreznik@aecom.yu.edu USA
SO CMLS Cellular and Molecular Life Sciences, (November, 2001) Vol. 58, No. 12-13, pp. 1790-1804. http://link.springer.de/link/service/journals/00018/ . print.
ISSN: 1420-682X.
DT General Review
LA English
AB Carboxypeptidases perform many diverse functions in the body. The well-studied pancreatic enzymes (carboxypeptidases A1, A2 and B) are involved in the digestion of food, whereas a related enzyme (mast-cell carboxypeptidase A) functions in the degradation of other proteins. Several members of the ***metallocarboxypeptidase*** gene family (carboxypeptidases D, E, M and N) are more selective enzymes and are thought to play a role in the processing of intercellular peptide messengers. Three other members of the ***metallocarboxypeptidase*** gene family do not appear to encode active enzymes; these members have been designated CPX-1, CPX-2 and AEBP1/ACLP. In this ***review*** , we focus on the recently discovered carboxypeptidase Z (CPZ). This enzyme removes C-terminal Arg residues from synthetic substrates, as do many of the other members of the gene family. However, CPZ differs from the other enzymes in that CPZ is enriched in the extracellular matrix and is broadly distributed during early embryogenesis. In addition to containing a ***metallocarboxypeptidase*** domain, CPZ also contains a Cys-rich domain that has homology to Wnt-binding proteins; Wnts are important signaling molecules during development. Although the exact function of CPZ is not yet known, it is likely that this protein plays a role in development by one of several possible mechanisms.

L31 ANSWER 2 OF 8 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 2
AN 2001264851 EMBASE
TI Amyloid beta peptide processing, insulin degrading enzyme, and butyrylcholinesterase.
AU Balasubramanian A.S.
CS A.S. Balasubramanian, Department of Biotechnology, Bharathiar University, Coimbatore 641046, India
SO Neurochemical Research, (2001) 26/4 (453-456).
Refs: 28
ISSN: 0364-3190 CODEN: NEREDZ
CY United States
DT Journal; General Review
FS 008 Neurology and Neurosurgery
029 Clinical Biochemistry
LA English
SL English
AB Amyloid beta peptide implicated in Alzheimers disease is cleaved by insulin degrading enzyme (IDE). Abnormal cholinesterases similar to butyrylcholinesterase (BChE) are found in Alzheimer brain. The similarities between IDE and BChE (which is known to have an arylacylamidase and a ***metallocarboxypeptidase*** -like activity) such as their zinc metalloenzyme nature, their localization in glia and their ability to bind amyloid peptide in Alzheimers disease raise interesting questions.

L31 ANSWER 3 OF 8 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.DUPLICATE 3
AN 2001:243859 BIOSIS
DN PREV200100243859
TI Thrombin-activatable fibrinolysis inhibitor (TAFI, plasma procarboxypeptidase B, procarboxypeptidase R, procarboxypeptidase U.
AU Bouma, Bonno N. (1); Marx, Pauline F.; Mosnier, Laurent O.; Meijers, Joost C. M.
CS (1) Thrombosis and Hemostasis Laboratory, Department of Haematology, University Medical Center Utrecht, G.03.647, Utrecht, 3508 GA: b.n.bouma@lab.azu.nl Netherlands
SO Thrombosis Research, (March 1, 2001) Vol. 101, No. 5, pp. 329-354. print.
ISSN: 0049-3848.
DT General Review
LA English
SL English
AB Recently, a new inhibitor of fibrinolysis was described. This inhibitor downregulated fibrinolysis after it was activated by thrombin, and was therefore named TAFI (thrombin-activatable fibrinolysis inhibitor; EC 3.4.17.20). TAFI turned out to be identical to previously described proteins, procarboxypeptidase U, procarboxy-peptidase R, and plasma procarboxypeptidase B. In this overview, the protein will be referred to as TAFI. TAFI is a procarboxypeptidase and a member of the family of

metallocarboxypeptidases . These enzymes are circulating in plasma and are present in several tissues such as pancreas. In this ***review*** , we will describe the properties of basic carboxypeptidases with the emphasis on the role of TAFI in coagulation and fibrinolysis. It cannot be ruled out, however, that TAFI has other, yet undefined, functions in biology.

L31 ANSWER 4 OF 8 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 4
AN 2000081146 EMBASE
TI ***Metallocarboxypeptidases*** and their protein inhibitors: Structure, function and biomedical properties.
AU Vendrell J.; Querol E.; Aviles F.X.
CS F.X. Aviles, Departament de Bioquimica, Facultat de Ciencies, Universitat Autonoma de Barcelona, E-08193 Bellaterra, Spain. fx.aviles@blues.uab.es
SO Biochimica et Biophysica Acta - Protein Structure and Molecular Enzymology, (7 Mar 2000) 1477/1-2 (284-298).
Refs: 105
ISSN: 0167-4838 CODEN: BBAEDZ
PUI S 0167-4838(99)00280-0
CY Netherlands
DT Journal; General Review
FS 029 Clinical Biochemistry
LA English
SL English
AB Among the different aspects of recent progress in the field of ***metallocarboxypeptidases*** has been the elucidation of the three dimensional structures of the pro-segments (in monomeric or oligomeric species) and their role in the expression, folding and inhibition/activation of the pancreatic and pancreatic-like forms. Also of great significance has been the cloning and characterization of several new regulatory carboxypeptidases, enzymes that are related with important functions in protein and peptide processing and that show significant structural differences among them and also with the digestive ones. Many regulatory carboxypeptidases lack a pro-region, unlike the digestive forms or others in between from the evolutionary point of view. Finally, important advances have been made on the finding and characterization of new protein inhibitors of ***metallocarboxypeptidases*** , some of them with interesting potential applications in the biotechnological/biomedical fields. These advances are analyzed here and compared with the earlier observations in this field, which was first explored by Hans Neurath and collaborators. Copyright (C) 2000 Elsevier Science B.V.

L31 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2002 ACS
AN 1999:54723 CAPLUS
DN 130:91941
TI Basic (that cleaved residues arginine and lysine) ***metallocarboxypeptidase*** of mammalian tissues: structure, properties and functions
AU Vernigora, A. N.; Gengin, M. T.
CS Penz. Gos. Pedagog. Univ. im. V.G. Belinskogo, Penza, Russia
SO Ukrainskii Biokhimicheskii Zhurnal (1998), 70(4), 16-24
CODEN: UBZHD4; ISSN: 0201-8470
PB Institut Biokhimii im. A. V. Palladina NAN Ukrainy
DT Journal; General Review
LA Russian
AB A ***review*** with 79 refs. The structure, phys., chem. and catalytic properties, functions and biol. role of mammalian basic carboxypeptidases are obsd. Genetic and phylogenetic research data show the existence of a family of basic metal-dependent carboxypeptidases. The connections between structure, localization and function of this enzyme are discussed.

L31 ANSWER 6 OF 8 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 5
AN 93336178 EMBASE
DN 1993336178
TI Noncholinergic functions of cholinesterases.
AU Balasubramanian A.S.; Bhanumathy C.D.
CS Neurochemistry Laboratory, Department of Neurological Sciences, Christian Medical College/Hospital,Vellore 632 004, India
SO FASEB Journal, (1993) 7/14 (1354-1358).
ISSN: 0892-6638 CODEN: FAJOEC
CY United States
DT Journal; General Review
FS 008 Neurology and Neurosurgery
029 Clinical Biochemistry
LA English
SL English
AB Cholinesterases (acetylcholinesterase and butyrylcholinesterase) exhibit additional catalytic activities apart from their well-known action in hydrolyzing choline esters. An amine-sensitive aryl acylamidase activity is exhibited by both acetyl- and butyrylcholinesterases. A ***metallocarboxypeptidase*** -like activity is found associated with both acetyl- and butyrylcholinesterases. The peptidase activity exhibited by butyrylcholinesterase was located in a 50-kDa COOH-terminal fragment. Acetylcholinesterase is implicated in noncholinergic functions in the substantia nigra. A relationship between tumorigenesis, cell differentiation, and cholinesterases has been speculated. The sequence similarities between different esterases, lipases, thyroglobulin, cell adhesion proteins, and cholinesterases would make it appear that cholinesterases are capable of exhibiting more than one biological activity and their functions are wider than what is hitherto known.

L31 ANSWER 7 OF 8 EMBASE COPYRIGHT 2002 ELSEVIER SCI. B.V.DUPLICATE 6
AN 93050005 EMBASE
DN 1993050005
TI Advances in metallo-procarboxypeptidases. Emerging details on the inhibition mechanism and on the activation process.
AU Aviles F.X.; Vendrell J.; Guasch A.; Coll M.; Huber R.
CS Departament de Bioquimica, Universitat Autonoma,E-08193 Bellaterra, Spain
SO European Journal of Biochemistry, (1993) 211/3 (381-389).
ISSN: 0014-2956 CODEN: EJBCAI
CY Germany
DT Journal; General Review
FS 029 Clinical Biochemistry
LA English
SL English
AB Our knowledge on the structure and functionality of pancreatic carboxypeptidases is rapidly expanding to include that of their zymogen forms. The recent application of fast and mild isolation procedures, together with modern molecular genetic and biochemical-biophysical characterization approaches, has provided a clearer view of the basic structures and functional states in which these zymogens occur, and their evolutionary relationships. The same holds for related ***metallocarboxypeptidases*** , either in the pro or active forms, that have been isolated and characterized in non-digestive fluids and tissues, where they probably play an important role in protein and peptide processing. The determination of the three-dimensional structure of the A and B pancreatic zymogens has revealed the molecular determinants of their inactivity and proteolytic activation. The folding of their 95-residue activation segment in a globular N-terminal domain (74-81 residues) and in a connecting region (20-14 residues), and the specific contacts of these pieces with the substrate binding sites of the enzyme, are important factors in zymogen inhibition. On the other hand, the different length of the .alpha.-helical connecting region and the stability of its contacts with the enzyme account for the different activation properties of A and B zymogens.

L31 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2002 ACS
AN 1988:488454 CAPLUS
DN 109:88454
TI Methods for metal substitution
AU Auld, David S.
CS Dep. Pathol., Harvard Med. Sch., Boston, MA, 02115, USA
SO Methods Enzymol. (1988), 158(Metallobiochemistry, Pt. A), 71-9
CODEN: MENZAU; ISSN: 0076-6879
DT Journal; General Review
LA English
AB A ***review*** , with 30 refs., on various methods of substituting metals into proteins which are in either the cryst. or soln. state. The methods discussed are described for carboxypeptidase A and include equil. dialysis in presence of a chelator, prepn. by gel permeation chromatog., direct exchange by equil. dialysis, use of ultrafiltration device, and prepn. of ***metallocarboxypeptidase*** derivs. from crystals. Comments are made on each procedure.

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L2	L1 same (knockout or knock-out or knock out or deficien$ or disrupt$ or abolish$)	2	L2
L1	CX2 or carboxypeptidase X2 or metallocarboxypeptidase X2 or CPX2 or CPX-2	603	L1

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